



Research Progress on Nursing Intervention for Oral Treatment of Children Under General Anesthesia

TingTing Zhong¹, JunQiang Mo^{2*}

¹ Affiliated Stomatology Hospital of Guilin Medical University, China

² Affiliated Hospital of Guilin Medical University, China

* Corresponding Author: JunQiang Mo

Article Info

ISSN (online): 2582-7138

Volume: 06

Issue: 02

March-April 2025

Received: 20-01-2025

Accepted: 21-02-2025

Page No: 116-119

Abstract

In order to understand the nursing situation of children's oral therapy under general anesthesia, and to explore how to improve nursing measures, improve treatment effects, reduce the incidence of adverse reactions and patient satisfaction, this paper reviews the research progress of nursing intervention in children's oral therapy under general anesthesia.

DOI: <https://doi.org/10.54660/IJMRGE.2025.6.2.116-119>

Keywords: general anesthesia; Pediatric Oral Treatment; Nursing

Introduction

Pediatric dental general anesthesia (DGA) is a behavior management technique in which a trained anesthesiologist and pediatric dental staff work together to complete dental treatment by using anesthetic drugs under close supervision to bring children into an unconscious state^[1]. With the popularization of DGA, higher requirements have been put forward for the care of oral treatment of children under general anesthesia, so it has become a trend to explore scientific, reasonable and optimized nursing models. This article reviews the application effects of different nursing intervention modes in the oral treatment of children under general anesthesia, so as to explore the scientific and standardized nursing process.

1. Application of evidence-based nursing in the oral treatment of children under general anesthesia

Evidence-Based Nursing is a form of nursing that is based on the latest and most reliable scientific evidence, and advocates that caregivers should make full use of scientific research results to provide the best quality care for patients in the actual nursing process^[2].

Evidence-based nursing is a practical process in which medical staff combine the clinical practice experience of specific diseases, look for valuable evidence in clinical research reports with high feasibility in the past, and rationally use relevant evidence to formulate and implement targeted nursing interventions. Evidence-based nursing can make nursing more proactive, standardized and procedural^[3,4,5].

1.1 Application of evidence-based nursing in oral diseases

Current research results on the application of evidence-based practice in the field of nursing in oral diseases have achieved remarkable results. 2024, Hu Mengjiao *et al.*^[6] systematically retrieved the literature on the oral health self-management of adolescent orthodontic patients at home and abroad through the "6S" model, and summarized the relevant evidence of oral health self-management of adolescent orthodontic patients at home and abroad through evidence-based methods, so as to provide a theoretical basis for standardizing the content of health education for nursing staff. Improve self-management skills of adolescent patients. The results of Yang *et al.*^[7] showed that the application of evidence-based nursing could promote postoperative recovery, alleviate patients' anxiety and depression, and have high nursing satisfaction, indicating that the application of

evidence-based nursing in jaw cyst curettage can reduce surgical trauma, promote postoperative recovery, alleviate patients' anxiety and depression symptoms, and improve patients' nursing satisfaction, which is worthy of clinical promotion and application. Studies^[8,9] have shown that evidence-based nursing interventions for patients with oral and maxillofacial traumatic fractures can improve their mental health, quality of life, and aesthetic outcomes^[8]. While ensuring the aesthetics of the wound, it can promote wound healing and oral function recovery in patients with oral and maxillofacial traumatic fractures, improve the poor psychological state of patients, and improve the quality of life and nursing satisfaction^[9]. The intervention of patients with oral and maxillofacial traumatic fractures can improve the medical coping of patients with oral and maxillofacial traumatic fractures, increase patients' expectations of surgical results, and alleviate their postoperative anxiety and depression, which is worthy of clinical promotion.

Due to the continuous progress of medicine, it is necessary to continuously optimize nursing methods, and the exploration of nursing models has tended to be combined from a single model to multiple nursing models. An Fengfeng *et al.*^[10] selected 106 patients with oral and maxillofacial fractures and enrolled them in the observation group and the control group, with 53 cases in each group, using a simple, random method. The results showed that, evidence-based intervention combined with continuous nursing could help improve the psychological state of patients after discharge, and improve training compliance rate and, reduce the incidence of complications. Liu Li *et al.*^[11] discussed the practical effect of evidence-based nursing combined with personalized psychological intervention in the perioperative period of patients with oral and maxillofacial fractures, and the results showed that evidence-based nursing combined with personalized psychological intervention in the perioperative period of patients with oral and maxillofacial fractures effectively improved the adverse mood and complications of patients, and the rate of excellent nursing, wound healing and oral function recovery were improved.

1.2 The use of evidence-based nursing in pediatric general anesthesia surgery

Evidence-based nursing plays an important role in the care of children with general anesthesia and pediatric oral therapy. Li *et al.*^[12] collected 100 pediatric patients with general anesthesia and divided them into two groups by randomized double-blind method, control group with routine care, the observation group with evidence-based, care, compared 2The incidence of postoperative respiratory complications and the satisfaction of parents with the quality of nursing in the group showed that evidence-based nursing can effectively reduce the occurrence of respiratory complications after general anesthesia, quality of clinical nursing. Hu Wenyan *et al.*^[13] based on evidence-based methods to improve the early decubitus position, of children after general anesthesia and constructed evaluation indicators, the results showed that after the application of the evidence, the pain of the children was significantly improved compared with before the application of the evidence, satisfaction of family members with nurses' education was significantly improved compared with that before the application of the evidence,, showed that the application of evidence-based evidence on the improvement of the early recumbent position after general anesthesia, beneficial to improve the pain of children, improve the satisfaction of family members with nurses, improve nurses' awareness of improving the recumbent position, maintain a good nurse-patient relationship.

1.3 Application of evidence-based care in pediatric oral therapy

The results of Ma Sisi *et al.*^[14] showed that evidence-based nursing applied to the treatment of orthodontic children can effectively improve the oral health of children, reduce their negative emotions, improve their treatment compliance, and reduce the incidence of complications. The results of Jiang Lamei *et al.*^[15] showed that the implementation of evidence-based nursing combined with family members in, the treatment of pediatric orthodontics can further improve the treatment compliance of children, make children maintain a positive and optimistic attitude, and is conducive to improving the treatment effect, reducing the occurrence of complications, safety of treatment.

The application of evidence-based nursing in clinical practice, nursing staff no longer only rely on experience to carry out nursing practice, but through the combination of literature research and clinical practice, through in-depth analysis and understanding of patient needs, to develop scientific and targeted nursing interventions, such as comprehensive and detailed assessment, close observation of disease changes, and the establishment of a doctor-nurse-patient collaboration group, which is helpful to improve the professional level of nursing and optimize nursing measures to reduce complication rates, improve patient satisfaction, and advance the discipline of nursing^[16, 17]. Evidence-based nursing has played an active role in pediatric general anesthesia surgery, pediatric oral therapy and various oral diseases, and has confirmed that evidence-based nursing can improve treatment compliance, reduce mortality, improve nursing satisfaction, and improve nursing level. However, there are relatively few targeted studies on evidence-based nursing for specific oral treatment of children under general anesthesia, and it will be of great significance to further promote and apply the evidence-based nursing model in the nursing of oral treatment of children under general anesthesia in the future.

2. The application of systematic care in the oral treatment of children under general anesthesia

Systematic nursing is a new type of high-quality nursing model, which has a variety of advantages such as comprehensive, systematic, scientific and rational, which can carry out symptomatic intervention according to the patient's disease situation and improve his quality of life. The core of the treatment is the patient, and the effect of treatment is strengthened by providing patients with systematic and comprehensive services in psychological, physiological, and dietary aspects^[18]. In recent years, the research results on the application of systematic nursing in pediatric oral treatment have achieved remarkable results. /b15>Li Meiyuan *et al.*^[18] showed that systematic nursing intervention reduced the heart rate, respiratory rate, and blood pressure indexes of children treated with caries under general anesthesia, and reduced the stress response, reduced the degree of agitation during anesthesia recovery, relieved postoperative pain, and prevented adverse reactions such as cough and sore throat, which is worthy of popularization and application. Shi Cuiping^[19] showed that the systematic nursing intervention model could significantly reduce the incidence of agitation and postoperative related adverse reactions in children in the recovery period after DGA, nursing satisfaction of, goal of high-quality nursing, which is worthy of clinical application and promotion.

3. The application of motivational interviewing techniques in the oral treatment of children under general anesthesia

As a collaborative evidence-based medical communication technique, motivational interviewing (MI) has shown good intervention effects in improving the compliance of patients with chronic diseases, and can help patients carry out long-term and effective self-health management. MI is a physician-patient collaborative process in which healthcare providers address ambivalence by exploring patients' understanding and beliefs about their illness and how it fits into their life context, evoking intrinsic motivation for behavior change, thereby changing their negative beliefs, enhancing confidence, and behavior [20]. Hao Pengxiang *et al.* [21] divided 130 children treated with DGA into experimental group and control group, and recorded the caries activity, number of dental caries, and oral hygiene habits of DGA before, 1, 3, and 6 months after DGA. Comparing the differences between two different oral health management methods in improving the postoperative outcomes of children with DGA, the results showed that motivational interviewing technology has obvious advantages in reducing the risk and rate of caries after DGA compared with traditional conventional oral education.

4. The application of whole-process standardized management in children's oral treatment

Whole-process standardized nursing [22] can be summarized as the establishment of a whole-process standardized nursing team, combining the perioperative clinical care pathway with continuous nursing intervention, and combining the patient's own characteristics during the treatment, recovery, and follow-up. Provide patients with professional guidance in psychological and behavioral, so as to improve patients' treatment compliance, health needs. Yuan *et al.* [23] explored the effect of whole-process standardized management in children's oral health, divided 202 children with oral diseases into nursing group (101 cases) and control group (101) using the random number table method/b24>) showed that the whole process of standardized management could improve the quality of oral health and reduce the incidence of dental caries, the effect of standardized management in children's oral health behaviors was significant.

5. Application of fine nursing in the oral treatment of children under general anesthesia

The refined nursing model is based on, nursing and more comprehensive optimization, so that the nursing service can meet the needs of patients to the greatest extent, and at the same time cooperate with physical and psychological, bring the best treatment effect to patients [24]. Yu Hongyan *et al.* [25] divided 108 children into control group and intervention group, the control group was given perioperative routine nursing measures, and the intervention group was given refined nursing interventions. The results showed that refined, children undergoing oral general anesthesia surgery could effectively improve children's compliance with treatment and nursing, reduce the incidence of adverse events during treatment, shorten the treatment time, reduce children's pain, improve clinical efficacy.

Due to the age limit, the understanding and acceptance ability of the treatment of the disease and related care are not strong, and the compliance is poor, which makes it difficult for clinical surgery and postoperative recovery. Perioperative nursing intervention is a necessary measure to improve children's compliance and actively cooperate with treatment, and is an important means to ensure the smooth

implementation of treatment and accelerate the postoperative recovery of children. The results of the above research results show that the use of scientific and reasonable nursing intervention mode in the nursing of oral therapy for children under general anesthesia can effectively improve the compliance of children with treatment and nursing, effectively reduce the occurrence of complications, not only ensure the safety of treatment, but also improve the satisfaction of children's parents. The nursing research of pediatric oral therapy under general anesthesia is of great significance for improving the efficacy and safety of pediatric oral therapy. However, there are still some deficiencies in the current nursing of oral treatment for children under general anesthesia, which is worthy of further discussion.

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