

# Oral Care for Traumatized Patients: Effectiveness of Teaching Programme Among Staff Nurses

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**Abstract:** This paper presents an overview on oral care for traumatized patients: effectiveness of teaching programme among staff nurses.

**Keywords:** Oral Care, Traumatized Patients, staff nurses

## 1. Introduction

Trauma is one of the leading causes of morbidity and mortality worldwide. Providing care for patients with severe injuries is a challenging problem in critical care medicine. During the early stages of hospital care, trauma patients may require management in a variety of settings including the emergency department, radiology department, and operating room; many of them are finally admitted to the Intensive Care Unit (ICU). Once the severely injured patient has been transferred to the ICU, his/her management consists of the provision of high-tech quality care and implementation of strategies to stabilize the patient, optimize the hemodynamic status and oxygenation, provide good hygiene and prevent local and systemic complications. These patients usually require prolonged bladder and bowel care, minimum environmental stimulation, suitable positioning, maintenance of patient safety and mechanical ventilation.

Oral hygiene is an integral part of care in intensive care units (ICUs), the relationship between oral hygiene and the reduction of oropharyngeal colonization with pathogenic organisms is less recognized. Microbial colonization of the oropharynx and of dental plaque has been associated with systemic and respiratory diseases, most notably ventilator associated pneumonia (VAP) in morbidity and mortality.

Evidence shows that monitoring oral hygiene in patients under the ventilator is one of the major routes to prevent VAP (11). Insufficient oral care leads to the colonization and aspiration of microbes that can lead to pneumonia (12). Insufficient oral care can also lead to a reduction of the salivary volume, dryness of the mouth, formation of dental plaque, gingival swelling, colonization of bacteria, stomatitis, dental infections and dental caries. Teaching and evaluating clinical knowledge, skills, and problem-solving abilities should include didactic and interactive activities with regular training sessions to prevent the decrease in performance that may occur with

time. For example Comprehensive education about ventilator modes, function of dials, and various skills to prevent and manage various patient- and ventilator related a problem promotes optimal patient centred care.

## 2. Methodology

A quasi-experimental research design was used in the study

### A. Setting

The study was conducted in Trauma Intensive Care Unit at carrier medical college Lucknow.

### B. Sample

30 Staff nurses working in ICU departments of carrier Medical college (15 GNM Nurses and 15 B.Sc. Nurses).

### C. Sampling technique

Convenience sampling method was used.

### D. Tools: first tool

Pre/post questionnaire sheet for the nurses' knowledge Tool two: Pre/post an observational checklist sheet for the nurses' skills: Data collection. The proposed study setting was assessed effect of oral care educational program on Knowledge and skills of critical care nurses. - Educational program v/as conducted by the researcher for ICU nursing about oral care whom were working in trauma intensive care unit at Assuit university hospital. - The total sample was divided into 6subgroups include from 5 nurses for each session. All the nurses were completed the pretest, attended the educational session and finished the posttest questionnaire. - Questionnaire sheet was developed by the researcher and used to assess nurses level of knowledge about frequency, different type solution of oral care, assessment of oropharyngeal cavity, respiratory tract infection and care of mechanically ventilated patients it consists of 25 items in addition to the socio demographic data as (name, age, sex, and years of experience). - Observational checklists were developed by the researcher to assess nurses level of skills in providing oral care. The educational program has been implemented in six sessions. The evaluation of knowledge was done immediately after program implementation by using the same questionnaire sheet (the post-test). The nurse whom paced

60% and more of the questionnaire sheet correctly was considered satisfactory but whom paced less than 60% was considered unsatisfactory.

### 3. Results

The study revealed that about 71.5% of them had married, about 66.7 of them had diploma qualified, in the case of years of experience 78.8% of them had from 1 to less than 5 years of experience. It Shows, before program none (10 %) of the General nurses had knowledge and (22%) in B.Sc. Nurses. While around the 68% of the General degree and (79.6%) in BSc Nurses had knowledge after educational programme shows there is a significant difference in level of knowledge between GNM and B.Sc. staff nurses.

Related to oral care skills which revealed in the pre education program (0.0%) none of the GNM had total skills related to prepare equipment, assess oropharyngeal, and technique use toothbrush 40% in BSc Nurses, there were this results increased post education becomes 91% in nursing diploma and 86.6% in bachelor also there were significant difference ( $P < 0.01$ ) between pre/ post education in nursing diploma & bachelor degree.

There is high significant statistically difference in nurse's level knowledge in comparison between pretest and post- test regarding to diploma and bachelor respectively at p. value less than 0.01 .it was notice before program, the majority of nurses had unsatisfactory total knowledge related to oral care procedure, (34.3%) in diploma and (41.5%) in bachelor , while the majority of them had satisfactory in total knowledge immediately after program (81.9% and 91.1%) in GNM and BSc Nurses respectively.

Relationship between nurse's years of experience and their level knowledge of post education was 95.0% nursing diploma from 1 to 5 years and 75.0% more than 5 years of experience were satisfactory of level knowledge with significant statistical difference at p. value  $< 0.05$ . In other hand 89% of bachelor more than 5 years and 90.0% of bachelor from 1 to 5 years of experience were satisfactory respectively of their level knowledge with more significant statistical difference at p. value  $< 0.01$ .

### 4. Discussion and conclusion

Oral care is generally included in the fundamental nursing curriculum; though, not many schools stress the importance of oral care for patients on ventilators. Oral care is generally included in the fundamental nursing curriculum; though, not many schools stress the importance of oral care for patients on ventilators. This study reveals useful insights on the oral hygiene knowledge and practices of nurses caring for critically

ill patients nurses lacked adequate knowledge related to oral health and generally were ill equipped to care for their patients oral hygiene needs it is crucial that training updates are conducted for qualified nurses to educate them on maintaining proper oral hygiene for the critically ill. concerning the effect of the present education program that there were significant differences between nurses' knowledge before and after the program. This may be explained by the fact that all of studied nurses did not attend any training courses in oral care procedure, was found between pre and post education in the study the impact of an evidence based practice education program on the role of oral care in the prevention of ventilator associated pneumonia.

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