

Evaluation of Nurses' Attitude toward the Provision of Oral Hygiene Care to Hospitalized Patients at Two Private Hospitals in South India

Abstract

Background: Several hospitalized patients with complex medical issues depend on nursing staff for their daily health care due to several functional limitations. This study investigates the Oral Hygiene Care (OHC) activities and attitudes of nurses toward hospitalized patients. **Materials and Methods:** A cross-sectional survey was conducted at two private hospitals using a self-administered, structured questionnaire distributed to 585 nursing staff. Data were analyzed through percentages. **Results:** About 85.70% of the nurses ranked OHC as important; among them, 74.00% ranked as important to extremely important. Very few (2.40%) rated providing OHC to be an unpleasant task and the majority (41.80%) felt lack or proper training is one of the reasons for providing OHC satisfactorily. **Conclusions:** Nurses experienced significant behavioral and physical difficulties while providing OHC, but still found it important. Therefore, training programs are needed for nurses to improve OHC to hospitalized patients.

Keywords: Hospital, knowledge, nurses, oral hygiene, patients

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Introduction

Oral hygiene has an impact on the clinical outcomes and well-being of hospitalized patients.^[1-3] The oral biofilm of hospitalized patients often has a considerable bacterial load that places them at risk for secondary infections.^[4,5] Aspiration of bacteria from oral biofilm can lead to both hospital-acquired and aspiration pneumonia.

Oral Hygiene Care (OHC) is vital in reducing these risks and several hospitalized patients depend on nurses for this care. Mechanical plaque control is very important in maintaining oral health. Providing OHC to dependent hospitalized patients is considered fundamental nursing care.^[6-8] Previous reports suggested that certified nursing assistants who provide care in nursing homes were unsure of how to provide care for hospitalized patients. It has also been reported that nurses who supervise the nursing assistants also had limited knowledge regarding the provision of oral health care in general and specifically lacked knowledge regarding the care of residents who exhibited care-resistant behavior.^[9] To date, there is little reported local empirical knowledge on the OHC practices of nurse's available.

The purpose of this study was to explore how nurses provide OHC to hospitalized patients and their knowledge and attitude in this regard.

Materials and Methods

A cross-sectional survey was conducted in 2018 (June to September) using a self-administered, structured questionnaire that was distributed to a convenient sample of 605 nursing staff at their workplaces (female and male wards and intensive care units). All the nurses agreed to participate and fill the form.

The need for the study was explained to the incharges of the nursing staff and the same was explained to the nurses (participants) in groups before distributing the survey forms. The survey was conducted in a teaching hospital located in Nellore district, South INDIA, with ~2,500 beds. The hospitals provide primary, secondary, and tertiary health care in different medical specialities. All the nursing staff that participated in the survey were working in hospitals which are attached to teaching institutes. A discussion was held by a group of periodontists and developed a questionnaire that was pretested for comprehension and practical utility,

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and the same was distributed to the nursing staff by the researchers with assistance from the nursing faculty in each ward/unit. The final questionnaire included questions on demographics, nurses training experience, their perceptions of performing OHC, their priorities and type of oral care delivered, and their knowledge on OHC of hospitalized individuals. Completed questionnaires were directly returned to the researchers on the same day. Individual identification is not reflected in the questionnaire; only numbers are used in a sequence so that the response rate could be determined. The data of 585 survey forms were entered in Microsoft Excel sheets and analyzed through percentages.

Ethical considerations

The study was approved by the Institutional Ethical Committee, Narayana Dental College and Hospital (Reference Number: NDC/IECC/PER/12-18/05, Dated 23 April 2018).

Results

The participation rate was 98.00% with 593 nurses returning the survey forms. After verification, 8 (1.50%) of surveys were excluded because of the missing data. Total of

585 (female = 580, male = 5) survey forms were analyzed and represented in percentages. About 82.00% of the nurses were aged between 20 and 30 years and 18.00% are within 31–40 years. Among the participants, 443 (75.70%) were B.Sc Nursing, 78 (13.30%) were M.Sc Nursing, and 64 (10.90%) were Auxiliary Nurse Midwife. Most of the respondents (97.20%) worked in three-rotating shifts.

Table 1 summarizes the nurse's responses on their beliefs, attitudes, and practices of OHC toward hospitalized patients. Most of the respondents (98.90%) provide OHC to hospitalized patients. Around 85.00% of the participants ranked providing OHC assistance as important, and among them, 25.00% ranked as very important and extremely important. Very few (2.40%) rated providing OHC to be an unpleasant task and majority (41.80%) felt lack of proper training is one of the reasons for not providing OHC assistance satisfactorily.

Discussion

This survey indicated that most of the nurses believe providing assistance in OHC as an important task. In the

Table 1: Responses of Nurses toward Oral Hygiene Care (OHC)

Topics/Questions	Response	Frequency	Percentage
Providing OHC to patients (<i>n</i> =585)	Yes	579	98.90
Source of knowledge on OHC	Nursing teachers	490	84.60
	Doctors	31	5.30
	Dentists	17	2.90
	Seniors	26	4.40
	Self-learning	15	2.60
At what time OHC was provided	Morning	527	91.01
	Night	10	1.70
	Morning and night	30	5.10
	More than two times	12	2.10
Type of OHC assistance provided	Tooth brushing	82	14.10
	Swabbing mouth	123	21.20
	Swabbing teeth	95	16.40
	Mouth rinsing	396	68.30
Providing OHC is equally important to other nursing care	Somewhat important	126	21.50
	Important	247	42.20
	Very important	72	12.30
	Extremely important	56	9.60
Barriers for providing OHC (<i>n</i> =579)	Lack of equipment	54	9.30
	Not advised by incharge	16	2.70
	Lack of manpower	25	4.30
	No guidelines	13	2.20
	Patient physical difficulties	95	16.40
	Lack of time	62	10.70
	Lack of training	242	41.80
	Patient compliance	149	25.70
	Unpleasant task	14	2.40
Total training time of OHC in nursing school (<i>n</i> =585)	2-3 h	483	82.60
	~5 h	92	15.70
	>5 h	10	1.70

hospitals where the survey was conducted, it was evident that the standard ward admission documentation did not include an assessment of a patient's oral health and oral hygiene practices. The main methods for OHC involved the use of mouth rinse and swabbing the mouth and tongue.

The participants in this study experienced many problems when providing OHC, predominantly lack of training and patient compliance. A significant lack of knowledge and training of the relevant aspects of handling and cleansing removable dentures was found. They are not familiar with the current recommended guidelines for performing an oral examination, and for the past few years, they did not attend any continuing education programs and workshops in this field. There was a lack of standard practice among the participants in performing OHC. These findings were consistent with past studies.^[10,11] Most of the nurses ranked mouth rinsing, with commercially available mouth rinses, as the main method for providing OHC to hospitalized patients. This method is directed toward the participant and patient comfort rather than the reducing oral microbial load and is not consistent with the available evidence.^[12-14] Many participants indicated that they were not instructed to perform an oral examination and due to this they ranked it in the low priority.

Majority of nurses (68.50%) expressed that the source of information regarding oral health was obtained during their training period in the nursing schools. Despite insufficient training hours in their nursing schools (83.00% said they had only 2 h of time categorized for oral health and OHC), a majority of the participants expressed that they were trained and gained information regarding OHC at their nursing schools.

Some limitations of the present study merit consideration. First, the study population was not large. Second, the study participants were restricted to a teaching institution, which might limit the generalizability of our findings. The present results, therefore, should be interpreted with some caution, because there is a possibility that this study participants differed from others who were working in private hospitals and public hospitals in different parts of India. Third, we could not obtain a detailed curriculum in their nursing schools regarding OHC for hospitalized patients. Finally, the participants were not grouped and comparison between them was not made.

Conclusion

It is evident with this study that there is insufficient knowledge and training of nurse's toward OHC assistance for hospitalized patients. It is very important that training updates are conducted for nurses to educate them on OHC for hospitalized and critically ill patients. The authors

believe that dentists, especially periodontists, would be a better choice for educating nurses in regard to the provision of OHC to hospitalized patients.

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Conflicts of interest

Nothing to declare.

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