

Oral and Dental Nursing Care Knowledge and Practice Among Nurses Working at Primary Dental Clinic, at Rohtak District, Harayana

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Abstract

Introduction: Nutrition is the basic component of child health. It is one of the prime importances for the attainment of normal growth and development. Nutrition is an important throughout childhood, it is more crucial during the first five years of a child's life.

Materials & Methods: A cross-sectional survey study design was utilized to attain the aim of the study. The study sample consisted of a cross-sectional sample of 112 nurses working at a dental clinic in Primary Health Care setting. Two tools were developed by the researcher were used for data collection: oral & dental nursing care knowledge questionnaire and Nurses' practices observational checklist.

Results: indicated that the majority of nurses have poor knowledge and practice regarding dental nursing care. The majority of nurses didn't receive any dental health topic in their academic education. Majority of nurses didn't receive any training related to on dental health in their nursing carrier. A significant relationship was found between total practice scores, years of experience and previous training on oral & dental nursing care. Also, a significant relationship was detected between nurses' total knowledge and total practice scores.

Conclusions: oral & dental nursing care knowledge and practice were poor among nurses working at a primary dental clinic. The Current study recommended implementation of the proposed training program for nurses working at a primary dental clinic to improve their knowledge and practice regarding dental nursing care.

Keywords: Dental health; Nursing care; Primary dental clinic

Introduction:

Children are the most valuable asset for any society. A nature of physical growth and development of children depends primarily upon the genetic endowments, nutritional status and surrounding physical environment conditions. Good nutrition is an indispensable component of healthy growth of mind and body. It plays a vital role in the physical, mental and emotional development of a child. Good health increases the brain ability to enhances children achievement and helps to avoid academic barriers. 1

Oral health is an important determinant for the quality of life, Good oral health enables individuals to communicate effectively, eat and enjoy a variety of foods. The cranio-facial complex allows a person to speak, smell, taste, and chews also provide protection against infections and environmental threats. [1, 2] Additionally, poor oral health affects the ability to sleep well, especially in the presence of pain, and impacts on a person's perception of self – both their self-esteem and self-confidence. 3

In Egypt, the first nationwide survey of oral health conducted by the World Health Organization, (2014) involved different sectors of the society, including orphanages, school children, adults and pregnant mothers, the study results showed that nearly 70% of examined children had some untreated caries experience; meanwhile, 80% of participants were suffering from some form of periodontal disease. Forty percent of participants reported that they experienced dental problems at the time of examination but did not seek a dentist for treatment. 20% had never been to a dentist.

In nutrition vitamins are essential food factors to be included in diet for maintaining proper health and vitality. Vitamins are organic compounds occurring in small quantities in the different natural foods and necessary for the growth and maintenance of good health in children.²

Vision is an integral part of effective communication and learning. Because of its significant impact on children's life and impairment of vision is an important health problem. Vision changes are common during the teenage years. The onset of refractory errors or worsening of previous errors peaks in adolescence as a result of the growth spurt. The main goal is to detect new refractive errors. Adolescent with refractive changes are referred for contacts or glasses as appropriate.³

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Aim of the Study

- The aim of the current study was to assess dental nursing care knowledge and practice of oral health among nurses working at primary dental clinic.
- Propose a training program on dental nursing care based on nurses knowledge and skills.

Materials and Methods

Research Design: Cross-sectional survey design was utilized to assess oral and dental care provided by nurses working at settings providing primary health services.

Setting: This study was conducted at (46) PHC centers, at Haryana

Sample: A cross-sectional A total sample of all nurses 112 nurses at the randomly selected dental clinic at primary health care setting at the period of six months from December 2022 until the end of February 2023 were performed.

Data Collection Tools: After reviewing the related national and international literature, Tools of data collection were developed by research investigators to assess dental nursing care knowledge and practice among nurses working at primary health care level as follows:

First Tool: Nurses' knowledge regarding oral and dental nursing care: is composed of (16 questions) divided into 2 sections as follows:

1st Section Direct patient care: it contained (10 questions) to assess nurses' knowledge related to the care of a patient with dental health problems, health education, and post-operative instructions.

2nd Section dental clinic policies & procedures: it composed of (6 questions) related to commonly used dental instruments, correct usage, handling, storage and disposal of materials and equipment during general chairside procedures and infection control.

Second Tool: Nurses' practices observational check-list: A list of dental competencies for nurses working at primary dental clinics. It included 2 parts:

Part 1- Nurses practices related to a dental clinic policies & procedures: to assess the nurses' role at dental clinic, practices related to dental clinic physical setup, pre- care duties, post care duties during general chairside procedures; and infection control at the dental practice.

Part 2- Nursing care for a patient with dental health problem: it was an observational check-list developed by the investigator to assess nurses' practices related to direct patient chairside care during common dental treatment done at primary care level and health education provided to clients on home oral care and post-operative instructions.

Statistical Design: The data collected from the observations (handoff procedure and continuity of care) were coded and entered into (SPSS), Version 21.0, for analysis. Data were analyzed using the descriptive statistics in the form of Frequency distribution, Percentage, Mean and Standard Deviation, Statistical analyses were made and all the tests had the significance level of 0.05.

Results

Table1: Distribution of Nurses Regarding their Demographic Characteristics (N=112)

Demographic Characteristics	No.112	%

18-	26	23.2
23-	60	53.6
28-	15	13.4
33-	9	8
>37	2	1.8
-	26.150±1.731	
Education		
Diplomanurse	80	71.4
Technicalinstitute	32	28.6
Yearsofexperiences		
0-	33	29.5
2-	20	17.8
4-	25	22.3
6-	14	12.5
8-	20	17.9
Mean±SD	1.45.±0.58	
Receive Training program on oral and dental health		
Yes	44	39.3
No	68	60.7
Presence of dental health topics in their nursing education		
yes	7	6.3
no	105	93.8
Incorporation of dental health in nursing curriculum		
Yes	30	26.8
No	82	73.2

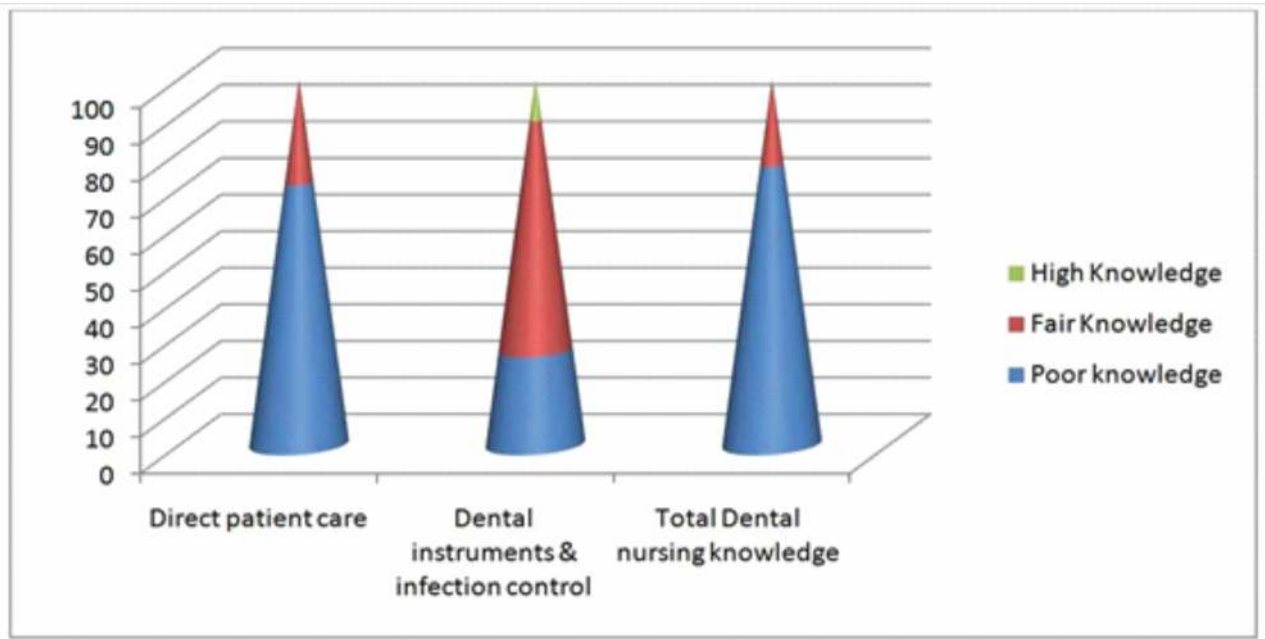


Figure1:Distribution of Nurses Regarding their Dental Nursing Care Knowledge (N=112)

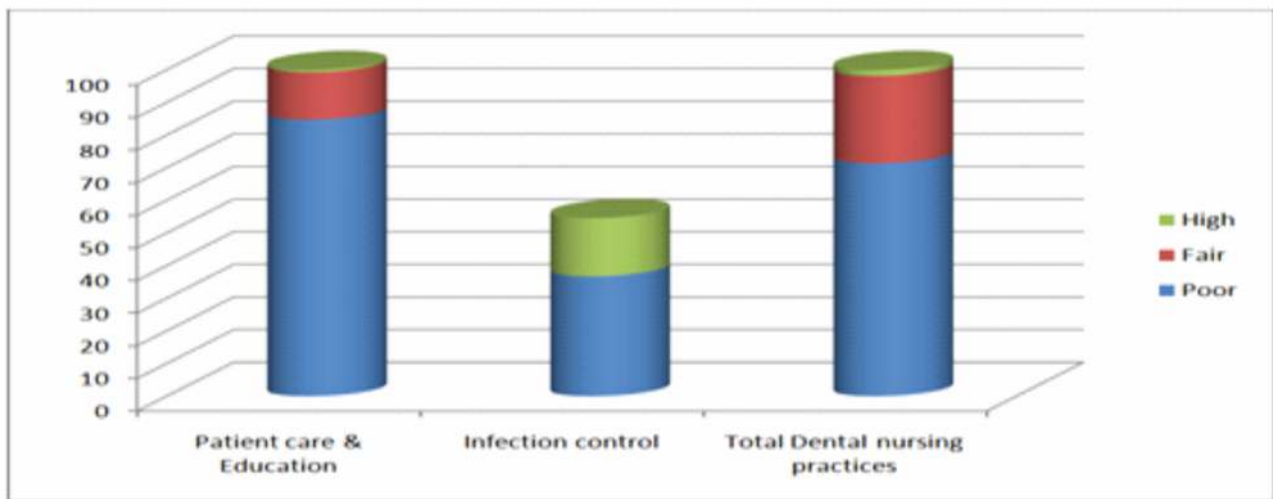


Figure 2: Distribution of Nurses Regarding their Dental Nursing Care Practice

(N=112)Table2:RelationshipbetweenNursesPracticesandtheirDemographic

DemographicData			TotalPracticeScore			Fisher's Exact Test:	D.F	P Value
			Low Practice	Fair Practice	High Practice			
Previous training	Yes	no	14	28	2	1.32	1	.02*
		%	31.8%	63.6%	4.6%			
No	no	66	2	0				
	%	97.1%	2.9%	0.0%				
Yrs. of Experience	0-	no	44	9	0	1.60	1	.004*
		%	83%	17%	0.0%			
	4-	no	28	10	1			
		%	71.8%	25.6%	2.6%			
	8-	no	8	11	1			
		%	40.0%	55.0%	5.0%			

*P value is statistically significant at the level of ≤ 0.05 .

Discussions

Finally, results of a current study reflect that significant relationship was found between nurses total practice scores and nurses previous training regarding oral & dental health at ($p= 0.02$). Also, a significant relationship was detected between nurses total practice scores and training topics at ($p= 0.04$). These results were in the same line with the study done by [18] aimed to evaluate the effect of Scotland's national child oral health improvement program (child smile) on dental nurses' performance to support the delivery of prevention in general dental practice, the study reported that there's a significant relationship between dental nurses skills and training program. These results emphasize the urgency of development and implementation of a training program to improve the care provided by nurses working at the primary dental clinic.

Conclusions

Overall, the study concluded that nurses working at PHC centers had poor knowledge and practice related to oral and dental nursing care. A Majority of nurses were lacking knowledge regarding patient care and dental clinic policies and procedures. The Majority of nurses didn't receive either oral & dental health topic in their academic education or training programs in their nursing career. A Significant relationship was found between total practice scores and previous training in dental nursing care. Also, a significant relationship was detected between nurses' total knowledge and total practice scores. The study recommended a training program on oral and dental nursing care for nurses at primary care level. The program will need to be tested for its effectiveness. Also, conducting comprehensive research on oral health care in nursing education is recommended.

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