Original Research Article

Knowledge, Attitude and Practices of Nurses to Oral Care for Hospitalized Patients in Services Hospital, Lahore

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Abstract: The oral care is essential component of nursing job and it have great impact on patient's safety and comfort during hospitalization. It prevent from hospital acquired infections. Mortality and morbidity rates are increased due to poor oral hygiene .Nurses are accountable for oral care but oral care is neglected in hospitals due to poor knowledge, attitude and practices. The aim of study was to determine nurse's knowledge, attitude and practices towards oral care. Quantitative, descriptive cross sectional study design was used to achieve the aim of the study. The study was conducted in services hospital Lahore, Pakistan. The study population was registered nurses working in services hospital Lahore, Pakistan. Sample size was be 222. Data was collected by convenience sampling. Tools: for data collection: I: Demographic characteristics, 2: Mouth hygiene knowledge sheet, 3: Attitudes regarding oral care, Part 4: Practice towards oral care. The data was analyzed using (SPSS) mainly descriptive statistics methods percentage distribution. Chi square to test the associations between variables. Results: the mean and St. D of the age of participants was 1.77 ± 0.800 with maximum experience of 1 - 5years 38.7% (n= 86). Educational level of participants was diploma in Nursing 69.8% (n= 115). The nurses had knowledge had fair knowledge >50% and Attitude level was negative < 60% and Practice level was poor < 60%.Majority of nurses do not perform oral care and give it less priority Oral hygiene care is often missed and neglected care. There is need to improve the nurse's knowledge and practice by training sessions, seminar and workshops. Nurses are in great need to improve the skill and competency to improve patient quality care.
Keywords: Knowledge, Attitude, Nurses

INTRODUCTION

Oral care is the part of fundamental nursing in which nurses give mouth care to hospitalized patients every 2 to 4 hours, each time it takes 5 to 7 minutes to brush the teeth, gums, tongue and moisturize the lips [1]. Patients who are not fully dependent can perform oral care by themselves but those who are dependent; are facilitated by nurses in the hospital setting. The main purpose of oral care is to keep patient infection free during hospital [2]. Oral care is basic care which is provided in hospitals. Good oral health improves nutritional status, recovery and help to communicate in a better way. Nurses assess the need of mouth care within 24 hours of patients stay in hospital. All hospital acquired infections occur within 48 hours of hospital stay. Its nurses responsibility to assess the oral cavity, prevent and provide care to patient. Nurse have great role to prevent the patient from hospital acquired infections by providing oral care [3].

A survey explains that Poor oral hygiene causes multiplication of bacteria in oral cavity and can cause hospital acquired infections e.g. ventilator associated phenomena (Heck, 2012). Oral ulcers,

Gingivitis, gum disease, dental caries are disease resulted by neglected or poor oral care [4]. According to report of centers for disease control and prevention (CDC) in Pakistan 63% patients gets oral infection during hospital stay especially in intensive care units. Oral care is less priority so it cause bacterial colonization which leads to ventilator associated pneumonia in most of ventilator dependent patients [5].

A mixed methods study shows that the knowledge, attitudes, and practices of staff nurses regarding the provision of daily mouth care. 24 Mouth care product audits, surveys, and semi structured, open-ended interviews were used to collect the data. The study concludes that daily mouth care of hospitalized patients prevent from infections and leads the patients to recovery. So, Nurses should know and take it as vital care for hospitalized patients [6].

Oral health makes man feel healthy and he participate actively in other health related activities to get recovery. Different chronic disease leads to poor oral hygiene so oral care is the requirement of hospitalized patients [7]. Oral hygiene prevent from

hospital acquired infections and improves patient's sense of wellbeing [8]. Oral care improves nutritional status of the patient which further have great role in recovery from disease. Oral disease due to poor oral health is very high in people who have commonly occurring health problems like cardiovascular and pneumonia [7]. Oral hygiene is to prevent from infection but observation proves that it's not done properly, never documented, usually a lost care. Nurse have poor practices in this regard. Oral care is done in hospitals once or twice in a day: It should be performed in every shift .Some organizations have no protocols for mouth care and those who have is not followed by nurses. Nurses are not using proper tools to clean the oral cavity. Poor oral hygiene is a serious issue and oral care needs to be implemented through standard guidelines. Nurses do not give priority to oral care due to poor attitude and skills. Nurses take it unpleasant and difficult task to perform oral care of hospitalized patients [9].

Periodontal disease is very common oral disease in Pakistan. Less than 28% of 12 year old children have healthy gingiva. Among women, 22% have bleeding gums. More than 95% of over 65 year old population has some form of gingival or periodontal disease. Due to neglected oral care: Oral cancer is the second most common form of cancer among men and women and constitutes about 10% of all malignant cancers [10]. Worldwide, tooth decay is the most common chronic disease. In Pakistan, people are not aware that how to prevent from dental caries as it is largely preventable and curable disease. However, research in two cities of Pakistan, Karachi and Lahore, found a 50–70% prevalence of tooth decay. Furthermore, according to WHO, cancer of the oropharynx is the sixth most common cancer worldwide; in Pakistan oral cancer is the second most common cancer in women and the third in men due to poor and neglected oral care [11].

It is nurse's responsibility and accountability to provide oral care to hospitalized patients. In hospitals nurses are not performing oral care and are busy in other health care activities. They are reluctant to perform this fundamental care. Oral health have great impact on overall health of hospitalized patients. It prevent from hospital acquired infections [4].

The study will provide information to nurses about nurse's practice and attitude towards oral care of hospitalized patients. The study will help the nurses to improve their skills for oral care. Study will also be beneficial for organization to know about the practices and attitude of nurses to oral care for hospitalized patients. It will help the organization to develop policies and strategies for improvement of quality care provided to patients.

Objectives
- To determine nurses knowledge towards oral care.
- To determine nurses attitude towards oral care.
- To determine the practice of nurses to oral care.

Research Question
- What is the nurses' knowledge, attitude and practice to oral care for hospitalized patients?
- Is there any association of knowledge, attitude and practice to qualification and year of experience?

LITERATURE REVIEW

A descriptive research study at Menoufia University hospital was done to assess the nurse's knowledge attitude and practice towards oral care of critically sick patients. Convenience sample was taken from 100 nurses at Menoufia University. The results of the study showed that nurses had knowledge but poor attitude and practices. The result showed 86 percent of nurses had negative attitude towards oral care and 100 percent had poor practice [4].

A cross sectional survey was done on oral assessment and nursing interventions, practice and educational needs in university of Benin teaching hospital Nigeria. Data was collected from 384 participants all ere female age group was 21 to 50yrs, response rate was only 96%, 94.3% agreed the oral care is important. Only 38% showed ability to perform oral care which indicate poor practice. 90.1% were agreed to get education and training on oral care for hospitalized patients [3].

Johnson, [2] conducted a study at Cardiff University on nurses emotions and oral care for hospitalized patients. Data was collected from 248 nurses. The study showed that oral care of hospitalized patients is compromised due to unpleasant feelings of nurses. Nurses feel unpleasant to provide oral care. Feelings and emotions act as a barrier to provide oral care to hospitalized patients.

A survey on oral care practices was done in South African intensive care units which shows that oral care is very important and vital care for hospitalized patient but nurses take it none seriously and it is always given low priority. It was quantitative cross sectional study with the purpose to determine the attitude of nurses for oral care. Convenience sampling was used to collect the data [12].

Salamone *et al.* [7] conducted a research in Australia on oral care for hospitalized patients. The study shows that the oral care is as necessary as other nursing care like bathing and toileting and those persons who are dependent on nurse's needs assistance from nurses for oral care. Study also reveals that nurses have

knowledge but do not implement it and oral care is neglected.

Another descriptive cross sectional research was conducted with the objective to describe the oral care knowledge, attitude and practices of nurses and compare the practices to recommendations of American journal of critical care. Random sampling technique was used and sample was taken from 347 nurses. Oral care was done every 2 to 4 hourly. Only 47% reported oral care as high priority. Results proves that there are policies for oral care but nurses are not following which indicate poor nursing practices and knowledge regarding oral care of hospitalized patients [9].

Lin [1] states the results of her research work on nurses' knowledge, attitudes and practices of oral care in Northern Taiwan. The descriptive cross sectional study design was used. Data collection was done by purposive sampling from 12 intensive care units and 250 participants were given a questionnaire which was based on knowledge, attitude, practice and demographic information. The results of the study showed that Oral care knowledge 58.2%, attitudes 79.4% and practices 49·8%. The persons age and work experience show no influence on oral care [1].

More research of Ibrahim *et al.*, [13] on nurses knowledge, attitude and practice towards oral care have different significance. The data was collected from154 intensive care unit nurses, cross sectional study design was applied and sampling was taken by convenience sampling method. The study results showed that the oral care practice of nurses was average among 57% and poor among 23%.only 20% results showed good practice of nurses for oral care. Lack of knowledge and patient non cooperative behavior were found as barriers to oral care [13].

Tembo [14] stated that the mouth of critically ill patients offer bacterial colonization and cause different type of oral diseases within hospital stay of patient. Proper oral care can prevent from such type of hospital acquired infections. For the purpose to determine nurse's knowledge, attitude and practice a study was done by non-experimental, quantitative, descriptive and cross-sectional design. Data was collected from 81 participants working in five different intensive care units. The results were knowledge 31.84%, attitudes 60.02% and practices were 31.84%.Qualification and years of experience were not significant in performing oral care. The results of the study clearly indicted .that nurses have poor knowledge and practices. More training workshops and skill is required to update the knowledge of nurses to oral care [14].

However another research study on the oral care practices of nurses for hospital admitted patients found poor knowledge, attitude and practices. A qualitative exploratory multiple-case study design was used to assess the nurse's attitude and practice towards oral care in hospital setting. It was explored that oral care is not done as vial care and always consider optional and never documented. Study concluded that nurses need to get more training and knowledge, and there is great need to change the attitude to improve oral care to hospitalized patients [15] A cross sectional survey was done on oral assessment and nursing interventions, practice and educational needs in university of Benin teaching hospital Nigeria. Data was collected from 384 participants all ere female age group was 21 to 50yrs, response rate was only 96%, 94.3% agreed the oral care is important. Only 38% showed ability to perform oral care which indicate poor practice. 90.1% were agreed to get education and training on oral care for hospitalized patients [3].

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METHODOLOGY

A quantitative, cross sectional study design was used for this research. The study was conducted in services hospital Lahore, Pakistan. Nurses working in indoor department except operation theatre and emergency department. The study population was selected registered nurses working in government services institute of medical sciences Lahore, Pakistan. Sample size was 222 registered nurses from 500 population of registered nurses. A convenience sampling technique was used to collect data. Sample was taken by the formula slovin's formula [16].

Formula include is $\quad$ $(n=N/1+N\ (0.05)^2$
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$\qquad$ $n=500/1+500(0.0025)$
$\qquad$ $n=500/501(0.0025)$
$\qquad$ $n=222$

Nurses working in government hospital, nurses was chosen female, male, diploma Bachler and master degree holders. Nurses working in medical, surgery, neurology, neonatal ICU, Adult ICU, Anesthesia department, Gynae was included in the study. Nurses who was not working in government hospital. Head nurses was excluded from study. Nurses working in outdoor department was excluded from study. LHV's, Midwives, Nursing Assistants was excluded from study. Self-administrative questionnaire was used as a tool to collect the data attached with this document. It was adopted from [4] Questionnaire consist of four parts of the following. It consist of gender, age, hospital, level of education and years of experience. Includes eleven statements with five point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree)It include five statements with Likert scale (Strongly agree, agree, neutral, Disagree, Strongly Disagree). It will assess the attitude of the participants. Eleven statements are included with five point Likert scale choices (strongly agree, agree, neutral, disagree, and strongly disagree) Study was conducted after ethical approval of the institution. Consent was taken from participants. Confidentiality was assured to the participants through written agreement. Independent Variable were Gender, age, qualification (diploma, bachelors and master degree), and years of experience. Dependent Variable were Level of knowledge, attitude and practice to oral care.

Data Analysis

Data was analyzed by using statistical package for social sciences (SPSS) version 21. Descriptive statistics method for percentage.

RESULTS

Table 1: Demographic Data Of The Participants

Item		No	%	Cumulative %
Gender	Male	2	0.9	0.9
	Female	220	99.1	100.0
	Total	222	100	
Marital status	Married	69	31.1	31.1
	Un-Married	153	68.9	100.0
	Total	222	100	
Age	20 - 25 Years	98	44.1	44.1
	26 - 30 Years	81	36.5	80.6
	31 - 35 Years	39	17.6	98.2
	36 - 40 Years	4	1.8	100.0
	Mean and St.D	1.77 ± 0.800		
Education level	Nursing Diploma	155	69.8	69.8
	Specialization	26	11.7	81.5
	Post RN	41	18.5	100.0
	Total	222	100	
Stay in organization	> 1 Year	58	26.1	26.1
	1 – 5 Years	86	38.7	64.9
	6 – 10 Years	62	27.9	92.8
	Above 10 Years	16	7.2	100.0
	Total	222	100	

Table 2: Number And Percentage Of Participants Related Their Knowledge level to Oral

Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean $\pm$St.D
	No	%	No	%	No	%	No	%	No	%	
I Can Identify Patients With An Oral Diseases.	10	4.5	17	7.7	32	14.4	120	54.1	43	19.4	3.76 ± 0.999
I Am Able To Perform Oral Assessment.	3	1.4	26	11.7	35	15.8	114	51.4	44	19.8	3.77 ± 0.946
I Can Identify Danger Factors Associated With Dental Caries.	5	2.3	35	15.8	45	20.3	105	47.3	32	14.4	3.54 ± 0.995
I Can Identify Risk Factors Associated With Gum Disease.	4	1.8	29	13.1	47	21.2	109	49.1	33	14.9	3.62 ± 0.952
I Can Recognize The Forms Of Mouth Care.	3	1.4	15	6.8	34	15.3	129	58.1	41	18.5	3.86 ± 0.844
I Can Complete A Mouth Care Risk Assessment.	2	0.9	43	19.4	35	15.8	100	45.0	42	18.9	3.62 ± 1.030
I Can Process And Report Any Oral Health Concerns.	3	1.4	18	8.1	57	25.7	108	48.6	36	16.2	3.70 ± 0.883
I Can Identify Techniques And Strategies Of Oral Care.	6	2.7	17	7.7	31	14.0	117	52.7	51	23.0	3.86 ± 0.950
I Can Recognize Patient Need Specialized Mouth Care.	6	2.7	11	5.0	29	13.1	116	52.3	60	27.0	3.96 ± 0.919
I Can Establish Plan For Observation By The Nurse.	3	1.4	27	12.2	38	17.1	110	49.5	44	19.8	3.74 ± 0.957
I Can Recognize Hazard Factors That Add To Poor Oral Hygiene.	4	1.8	19	8.6	27	12.2	115	51.8	57	25.7	3.91 ± 0.937

Scoring system:

< 50% poor knowledge, >50% fair knowledge, > 70% good knowledge

Table #2: Shows that 73.5% (n=163) positively responded to the question that they can identify patients with oral disease. 71.2 % (n=158) positively responded that they were able to perform oral assessment. 61.7% (n=137) fairly responded that they can identify danger factors associated with Dental caries. 64% (n=142) participants answered that they can identify risk factors associated with gum disease. 76.6% (n=170) positively responded that they can recognize the forms of mouth care.63.9% (n=142) positively responded they can complete the mouth care risk assessment. 64.8% (n=144) positively responded that they can process and report any oral health concern. 75.7% (n=168) positively responded that they can identify the techniques and strategies of oral care. 79.3% (n=176) positively responded that they can recognize the patient need specialized mouth care. 69.3 % (n=154) positively responded that they were able to establish a plan for observation by nurse. 77.5 % (n=172) positively responded that they can recognize the hazard factors that add to poor oral hygiene. Less than 20% of all participants responded neutral in every question. Out of eleven questions the percentage of 5 questions was fair and 6 shows good knowledge but overall percentage shows fair knowledge level of nurses to oral care for hospitalized patients.

Table 3: Number And Percentage Of Participants Related Their Attitude Level To Oral

Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean ± St.D
	No	%	No	%	No	%	No	%	No	%	
Oral care is a very high priority	9	4.1	19	8.6	21	9.5	81	36.5	92	41.4	4.03 ±1.105
Cleaning the oral cavity is an unpleasant task	30	13.5	70	31.5	31	14.0	72	32.4	19	8.6	2.91 ±1.233
The oral cavity is difficult to clean	22	9.9	79	35.6	39	17.6	65	29.3	17	7.7	2.89 ±1.160
The mouth of most ventilated patients gets worse no matter what I do	30	13.5	65	29.3	54	24.3	54	24.3	19	8.6	2.85 ±1.185
I feel it would be useful to use an oral assessment guide.	4	1.8	12	5.4	31	14.0	113	50.9	62	27.9	3.98 ±.895

Scoring system:

< 60% Negative Attitude, > 60% Positive Attitude

Table #3 Shows that 77.9% (n=173) positively responded that oral care is very high priority. 41% (n=91) positively responded to cleaning the oral cavity is unpleasant task. 37% (n=82) positively responded oral cavity be difficult to clean .32.9% (n=73) responded the mouth of ventilated patients gets worse no matter what I do. 78.8% (n=175) positively responded it would be useful to use an oral assessment guide. Out of five questions the percentage of three questions was poor (<50%) and two showed positive attitude (>70%), but overall percentage shows negative attitude level of nurses to oral care for hospitalized patients.

Table 4: Number And Percentage Of Participants Related Their Practice Level To Oral Care

Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean ± St.D
	No	%	No	%	No	%	No	%	No	%	
I'm doing oral care at all shifts	9	4.1	70	31.5	33	14.9	76	34.2	34	15.3	3.24 ± 1.173
I'm doing oral care every 2-4 hrs. at shift	14	6.3	98	44.1	51	23.0	40	18.0	19	8.6	2.78 ± 1.084
Each time I'm providing oral care it takes 5-7 min for each patient	6	2.7	59	26.6	34	15.3	98	44.1	25	11.3	3.35 ± 1.073
I'm considering the position of patient during providing oral care	5	2.3	24	10.8	30	13.5	108	48.6	55	24.8	3.83 ± .997
When I'm doing oral care I take into consideration brushing of teeth	7	3.2	48	21.6	48	21.6	91	41.0	28	12.6	3.38 ± 1.056
When I am doing oral care I take into consideration brushing of gum	5	2.3	48	21.6	57	25.7	88	39.6	24	10.8	3.35 ± 1.008
When I am doing oral care I take into consideration brushing of tongue	5	2.3	40	18.0	36	16.2	109	49.1	32	14.4	3.55 ± 1.018
When I am doing oral I care I take into consideration Moisturing of lips	4	1.8	22	9.9	32	14.4	104	46.8	60	27.0	3.87 ± .981
I'm deflating cuff pressure of ETT during oral care	33	14.9	66	29.7	47	21.2	58	26.1	18	8.1	2.83 ± 1.206
An assessment of a patient's oral care needs take place within 24hours of their admission to ICU	6	2.7	34	15.3	53	23.9	93	41.9	36	16.2	3.54 ± 1.023
I do documentation of assessment	2	0.9	31	14.0	34	15.3	84	37.8	71	32.0	3.86 ± 1.048

Table # 4: Shows that 49.5% (n=110) positively responded that they were doing oral care for all shifts. 26.6% (n=59) positively responded they were doing oral care every 2 - 4 hourly at shift. 55.4% (n=123) positively responded each time they were providing oral care it takes 5 - 7 mints for each patient. 73.4% (n=163) positively responded they were considering the position while providing oral care. 53.6% (n=119) positively responded to when I am doing oral care I take into consideration brushing of teeth. 50.4% (n=112) positively responded to when I am doing oral care I take into consideration brushing of gum. 63.5% (n=141) positively responded to when I am doing oral care I take into consideration brushing of tongue. 73.8% (n=164) positively responded to when I am doing oral care I take into consideration moisturizing of lips. 34.2% (n=76) positively responded they were deflating the cuff pressure of ETT during oral care. 58.1% (n=129) positively responded to an assessment of a patient's oral care need takes place within 24 hours of admission to ICU. 69.8 % (n=155) positively responded that they do documentation of assessment. Out of eleven questions the percentage shows answers of 3 questions have result < 50%, percentage of seven questions shows results > 50%, and only one question shows result > 70%. So overall practices are poor.

NORMALITY TEST

Normality tests was done data was collected and analyzed by SPSS, there was no missing value. Value of data was checked by kurtosis scores were knowledge1.828, attitude -0.68, practice 0.329. Skewness scores of knowledge -0.690, attitude-0.022 and practice -0.319 all were between +2 to -2.

KMO and Bartlett's Test

The assumptions proves that KMO value must be above. 60 and Bartlett's test must be significant so whole set criteria was fulfilled.

Associations between variables

Association between different variable was checked through chi square. Knowledge and

qualification showed statistically significant association with the value of p (.034). Knowledge and stay in organization showed statistically no significant association with the value of p (.728). Attitude and qualification of the participants showed statistically significant association with the value of p (.05). Attitude and stay in organization showed no statistically significant association with the value of p (.142). Practice and qualification of the participants showed no statistically significant association with the p value (.232).Practice and stay in organization showed no statistically significant association with value of p (.313)

DISCUSSION

The study shows that the majority of candidate were female and few were male. More of the participants were unmarried mean of the age of the participants was (1.77 + 0.800). While most participants were between the age of 20-25 years. Nursing diploma was highest education level of the candidates. In general these results nearly shows the same statics as presented by Mariam et al., (2015) had bachelor degree: the highest education level of both studies shows same percentage. The experience level of the participants was within 1-5 years.

Participants have knowledge that they can identify patient with an oral disease. While this finding is nearer to the other research by Samira *et al.,* [4] majority of participants rightly answered that they can identify the patient with oral disease. In this study the answer of the participants shows that they are able to perform oral assessment. This study shows the participants can identify techniques and strategies of oral care while other research shows only same number of participants are able to do this. The result level of total eleven questions shows, the result of five questions was fair and remaining questions shows good knowledge. Ibrahim *et al.,* [13] also explain the results of her study which highly indicated nurse's good knowledge of oral care.

Regarding to attitude the study indicates majority of the participants give high priority to oral care. They consider it vital and basic care to perform. Another study of Samira *et al.,* [4] is in agreement to the results of this study. Moreover the research of Mariam et al., (2015) in Philistine indicated more than half of the participants of the study took it high priority. Another study by Feider *et al*., [9] in United States showed same results where majority of participants consider oral care as a high priority. Furthermore a research done by perrie et al., (2011) showed maximum participants of the study had taken oral care a high priority. This study shows positive attitude of the participants.

The finding of this study as shows more than one third of the participants take it difficult to clean the oral cavity. The findings are agreement with the study of perrie et al., (2011) in South Africa where one fourth participants take it difficult to do oral care for hospitalized patient. But the study done in Philistine by Mariam et al., (2015) very few participants had taken it difficult to perform. So this study shows negative attitude in this regard. The finding shows that half of the participants disagreed that oral cavity remained the same or gets worse no matter what they do .while the study by Perrie et al., (2011) showed only one third disagreed. This study shows negative attitude of the participants towards oral care of the hospitalized patients.

By analyzing the results of this study it is stated that more than half of the participants agreed to use an oral assessment guide. While the study of perrie et al., (2011) and another study by Azodo *et al.,* [3] the maximum number of the participants desired to have an assessment guide for oral assessment. So this study shows positive attitude.

In this study less than half of the participants agreed or strongly agreed that its unpleasant task to clean the oral cavity. Another study in South Africa by Perrie et al., (2011) also showed less than half of participants agreed or strongly agreed to this statement which shows negative attitude of the participants towards performing oral care. The complete analysis of the attitude shows that the attitude of the participants to getting knowledge was positive and towards performing the skill or activity was negative.

The results shows the nursing practices to perform oral care of hospitalized patients in all the shifts and the frequency of performing the oral care is poor and fair respectively .But in contrast the study done by Feider *et al*., [9] shows half of the participants were performing oral care 2- 4 hourly per shift .The current study reveals that few nurses giving 5 - 7 minutes to perform oral care others give less than that. Brushing of teeth, gum, and tongue is taken fairly, the emphasis is to moisturize the gums only. Half of the nurses deflating cuff pressure of EET during the oral care. Oral care within 24 hours of admission to hospital or ICU was fairly performed. The only good practice was majority of nurses were considering the position of the patient while performing oral care. As compare to the other studies Samira *et al*., [4] also said that the nursing practices to perform oral care were poor. It was never done per shift and frequently. Although nurses focused to brush the gums only. Another study by Ibrahim *et al* [13] showed nurses perform oral care two times in a day and they performed it in less than 5 - 7 minutes [13]. Another research by Azodo *et al.,* [3] is highly evident that majority of nurses assessed and

provided oral care within 24 hours of admission to hospital. Practice and stay in organization showed no statistically significant association while another study by Samira *et al*., [4] also shows the same results as there was no significance between practice and year of experience .knowledge and stay in organization showed statistically no significant association while the other study by Samira *et al.,* [4] showed no significance between knowledge and year of experience. Knowledge and qualification shows significant association while the study of Samira *et al.,* [4] shows no significance between knowledge and qualification.

CONCLUSION

Oral care is basic and fundamental care provided by nurses during hospital stay to the dependent patients and those who are not dependent are assisted by nurses to perform oral care. Nurses are responsible and accountable for this care to prevent the patient from hospital acquired infections and feel them pleasant during hospital stay. By analyzing the results and discussion of this study it can be concluded that the knowledge of nurses was fair, attitude was negative and practices to oral care found poor. Statistically significant associations were found between knowledge and year of experience, attitude and qualification which shows that as the education gets higher attitude gets better. There is need to improve nurses knowledge, attitude and practices to promote quality care provided to patients by involving them in educational and training programs. Evidence based practice should be encouraged and written protocols must be followed by nurses.

RECOMMENDATIONS

As the study shows the poor knowledge, attitude and practices to oral care it is recommended that there must be teaching sessions for the nurses in the forms of seminars, workshops and symposiums to enhance the knowledge, attitude and practice. At organizational level there must be a guide line and policy to asses and provide oral care to the newly admitted patients and retained patients as early as possible.

LIMITATIONS

Time duration was the 1st and foremost limitation of this study. Convenience sampling technique was also a limitation. Population was only selected from one government hospital. Lack of interest of the participant's .Staff nurses refused to participate due to work overload, shortage of time, shortage of staff.

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