

KAP Study to Assess Oral Hygiene in Patient reporting in Teaching Hospital

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Abstract:

Objective: To assess the knowledge, attitudes and practice regarding the oral health in our community. **Study Design:** Cross Sectional Study. **Study Place and Study Duration:** From January 2018 to September 2018, in Dental Section Allied Hospital, Faisalabad and Sharif Medical and Dental College. **Material and methods:** A total number of 378 patients were enrolled in this study. A questionnaire was developed to gather the information required for the determination of knowledge, attitudes and behavior of the patient towards oral health. The questionnaire comprised of thirty three questions regarding different aspects of oral health care. It involved questions regarding demographic information, knowledge, attitudes and behavior of the patients. **Results:** Regarding oral care, n=213 (56.3%) used tooth paste, n=260 (68.8%) patients brush once a day, n=178 (47.1%) used vertical technique for brushing. n=138 (36.5%) changed their brush every six months while n=60 (15.9%) changed their brush after one year. n=189 (50%) patients brush their teeth in morning, n=166 (43.9%) brush their teeth for cleaning purpose. n=144 (38.1%) visited to dentist when they felt pain. n=170 (45%) ignore, n=98 (25.9%) go to the dentist and n=110 (29.1%) use home remedies when they felt dental decay. n=239 (63.2%) patients' family members brush their teeth regularly. Self-medication was observed as n=269 (71.2%). **Conclusion:** Although majority of the patients had good knowledge about health care but it was not associated with better attitudes, behavior and practicing of healthy habits. It can be suggested that poor socioeconomic conditions of majority of the public and lack of motivation for oral hygiene are the cause of poor behavior, attitude and practicing of dental care.

Keywords: Knowledge, Attitudes, Behavior, Oral Health

Introduction:

In recent years a considerable reduction in incidence and severity of oral diseases has been observed especially in developed countries ¹. A systemic and organized dental care has been employed to improve the oral health in children and young adults ^{2,3}. As a result of this systemically organized way of oral health care there has been significant decline in the frequency of dental caries in patients ⁴. Another advantage of this mode of health care is that, an increased number of adults are now able to keep their original denture for later stages of the life (5). But it has only improved overall dental health in developed countries unlike in developing countries where dental care is still one of the major health problems ⁶.

The reasons behind the improvement in overall dental health in developed and industrialized countries are the life style modifications, improved self care practices, changing living conditions and establishment of dental care programs. Moreover overall attitudes and behavior of general public have also grown ⁷. On the contrary in developing countries incidence of dental caries has increased gradually ⁸. It can be attributed to the fact that no dental or oral health care programs are performed in these communities.

Not many studies are there which could provide sufficient data regarding the knowledge, attitudes and behavior of the general population towards oral health care especially in developing countries like Pakistan. Therefore there is dire need to perform a study which can show the general trends of human population in our community towards oral hygiene.

Material and Method:

A total number of 378 patients were enrolled in this study From January 2018 to September 2018, in Dental Section Allied Hospital, Faisalabad and Sharif Medical and Dental College. All the patients aged 10 to 70 presenting to the out-patient department with the complaint of tooth ache were included in this study. Approval for the study was obtained from the Hospital Ethics Committee. Sample size was calculated from the reference study by Muhammad K. Al-Omiri et al ¹⁰. Non probability consecutive type of sampling technique was used to collect the sample size. A questionnaire was developed to gather the information required for the determination of knowledge, attitudes and behavior of the patient towards oral health. The questionnaire comprised of thirty three questions regarding different aspects of oral health care. It involved questions regarding demographic information, knowledge, attitudes and behavior of the patients.

Demographic information included age, gender, education status, occupations, socio-economic status, type of family and religion. For knowledge regarding dental pain questions regarding causes the rapid dental decay, source of oral health knowledge and frequency of visit to dentist were asked. Similarly for attitude regarding dental pain treatment questions regarding, duration of pain, relieving factor, aggravating factor, type of pain, intensity, associated symptoms, time when pain started, time period between 1st incidence of pain and 2nd incidence of pain, approach in case of pain and any habit. Practicing of oral care was judged by asking question about methods of cleaning teeth, frequency of brushing, technique of brushing, change of brush, time of brushing, reason to brush the teeth, reason for last dental visit, approach if there is dental decay, brushing habits of family members, home remedies and medications. All the data thus calculated was subjected to statistical analysis. Computer software SPSS version 23 was used to analyze the data. Frequency and percentage was calculated for quantitative variables while mean and standard deviation was calculated for qualitative variables.

Results:

Three hundred and seventy eight patients were included in this study, both genders. Gender distribution revealed as n=257 (68%) males and n=121 (32%) females. The mean age of the patients was 26.14±3.15 years. There were n=196 (51.9%) patients literate and n=182 (48.1%) were illiterate. Occupations distribution observed as n=47 (12.4%) employee, n=61 (16.1%) worker, n=121 (32%) student, and n=149 (39.4%) house wives. Socio-economic status noted as n=92 (24.3%) upper class, n=125 (33.1%) middle class and n=161 (42.6%) lower class. n=250 (66.1%) were living in joint family and n=128 (33.9%) were nuclear family. Whereas, n=364 (96.3%) Muslims were and n=14 (3.7%) were non-Muslims. (Table I).

Knowledge regarding dental pain was assessed from the patients from different questions. It was seen that majority of the patients were unfamiliar about the knowledge regarding dental pain table II. Attitude towards dental pain treatment of the patients were shown in table III. It was observed that majority of the patients did not take proper remedy for dental pain.

Regarding to oral care, n=213 (56.3%) used tooth paste, n=260 (68.8%) patients brush once a day, n=178 (47.1%) used vertical technique for brushing. n=138 (36.5%) changed their brush every six months while n=60 (15.9%) changed their brush after one year. n=189 (50%) patients brush their teeth in morning, n=166 (43.9%) brush their teeth for cleaning purpose. n=144 (38.1%) visited to dentist when they felt pain. n=170 (45%) ignore, n=98 (25.9%) go to the dentist and n=110 (29.1%) use home remedies when they felt dental decay. n=239 (63.2%) patients' family members brush their teeth regularly. Self-medication was observed as n=269 (71.2%). Distribution of home remedies is shown in table IV.

Table I
Demographic variables

Variable	Number	Percentage
Age (years)		
Mean±S.D	26.14±3.15	
Gender		
Male	257	68
Female	121	32
Education status		
Literate	196	51.9
Illiterate	182	48.1
Occupations		
Employee	47	12.4
Worker	61	16.1
Student	121	32
House wife	149	39.4
Socio-economic status		
Upper class	92	24.3
Middle class	125	33.1
Lower class	161	42.6
Type of family		
Joint	250	66.1
Nuclear	128	33.9
Religion		
Muslim	364	96.3
Non-Muslim	14	3.7

Table II
Knowledge Regarding Dental Pain

Variable	Number	Percentage
What causes the rapid dental decay		
Decreased brushing frequency	227	60.1
Increased sugar intake	75	19.8
Cold drink consumption	76	20.1
Source of oral health knowledge		
Media source	42	11.1
Family members	151	39.9
Friends	57	15.1
Teachers	105	27.8
Others	23	6.1
If gums bleed what you do		
Stop brushing	140	37.0
Increase brushing	76	20.1
Go to dentist	36	9.5
Nothing	126	33.3
Is oral health related to systemic health		
Yes	292	77.2
No	86	22.8
Frequency of visit to dentist		
Every 6 months	18	4.8
After a year	95	25.1
Never	265	70.1
Is it essential to visit dentist every 6 months		
Yes	245	64.8
No	133	35.2

Table III
Attitude Regarding Dental Pain Treatment

Variable	Number	Percentage
Duration of pain		
5 minutes	45	11.9
>5minutes	49	13.0
20 minutes	40	10.6
30 minutes	52	13.8
Continuous pain	192	50.8
Relieving factor		
Cold water gargles	19	5.0
Pain killers	206	54.5
Salt water gargles	55	14.6
Tooth paste	98	25.9
Aggravating factor		
Mastication	22	5.8
Sweets	116	30.7
Hot and cold things	151	39.9
Food impaction	28	7.4
Sour things	61	16.1
Type of Pain was		
Spontaneous	92	24.3
Stimulated	70	18.5
Referred	93	24.6
Non-referred	123	32.5
Intensity		
Mild	90	23.8
Moderate	133	35.2
Severe	155	41.0
Associated with		
Swelling	163	43.1
Fever	37	9.8
Sinus	24	6.3
Nothing	154	40.7
Sensitivity to		
Cold	216	57.1
Hot	55	14.6
Sweet	76	20.1
Sour	31	8.2
When did the pain started recently		
Within one week	254	67.2
Before one week	52	13.8
Before 2 weeks	54	14.3
Before 1 month	18	4.8
Time period between 1st incidence of pain and 2nd incidence of pain		
1 week	53	14.0
2 weeks	95	25.1
More than 2 weeks	113	29.9
1 month	117	31.0
What was your approach in case of pain		
Good doctor	11	2.9
Private clinic	26	6.9
Brushing regularly	128	33.9
Hakeem	8	2.1
Quack	112	29.6
Home remedy	78	20.6
Dam	4	1.1
Homeopathy	11	2.9
Why did you delay seeking consultation		
Busy life	19	5.0
Mild tolerable pain	95	25.1
Non availability of conveyance	58	15.3
Costly treatment	71	18.8
Pain is subsiding	38	10.1
Hospital faraway	55	14.6
Dental treatment fear	42	11.1
Do you have habit of		
Pan\chaliya	51	13.5

Niswar	26	6.9
Smoking	76	20.1
Carbonated drinks	144	38.1
Milk	67	17.7
None	14	3.7

Table IV
Practicing of Oral Care

Variable	Number	Percentage
Methods of cleaning teeth		
Tooth paste	213	56.3
Dentonic powder	34	9.0
Miswak	61	16.1
Mouth wash	48	12.7
Tooth picks	22	5.8
Frequency of brushing		
Twice a day	46	12.2
Thrice a day	5	1.3
Once a day	260	68.8
Do not brush	67	17.7
Technique of brushing		
Horizontal	170	45.0
Vertical	178	47.1
Circular	30	7.9
Change of brush		
Every 3 months	115	30.4
Every 6 months	138	36.5
After a year	60	15.9
When it gets rough	65	17.2
Time of brushing		
In morning	189	50.0
Before breakfast	13	3.4
In evening	22	5.8
Before going to bed	27	7.1
Both evening and morning	127	33.6
Reason to brush the teeth		
Cleaning purpose	166	43.9
Brightening of teeth	81	21.4
To stop bleeding	24	6.3
To stop cavity	107	28.3
Reason for last dental visit		
Extraction	123	32.5
Pain	144	38.1
Filling of cavity	111	29.4
On seeing dental decay what do you do		
Ignore	170	45.0
Go to dentist	98	25.9
Use home remedies	110	29.1
Do your family members brush their teeth regularly		
Yes	239	63.2
No	139	36.8
What home remedies you use		
Clove	22	5.8
Salt water gargles	25	6.6
Honey	28	7.4
Ice water	32	8.5
Tooth paste	113	29.9
Pain killers and antibiotics		
Interdental aid	21	5.6
Antibiotics	33	8.7
Pain killers	32	8.5
Medication		
Self	269	71.2
After consulting a doctor	109	28.8

Discussion:

Numerous factors are responsible for oral hygiene and oral health behaviors in a population. Positive reinforcement and proper informing about the health care regimen improves the compliance of the patients towards the treatment. Non compliance and non adherence to the oral hygiene practices is directly associated with lack of information and motivation. The more the knowledge a patient has regarding the dental care the more will be the possibility of him to seek preventive health care. Knowledge regarding the seriousness of the dental problem and benefits of the treatment available are essential for seeking of health care ^{10, 11}.

The results of our study suggest that overall behavior and attitude of people regarding the practice of oral hygiene and seeking the preventive health care in case of any complaint is very unsatisfactory. A large number of the patients who presented at the out-patient department were illiterate and belonged to poor socioeconomic class of the society. In previous studies poor attitudes and behavior have been attributed to the lack of oral health education programs ^{12, 13}. The problem in our community is not very different health education programs are conducted in very less amount which is why overall oral health knowledge, behavior and attitudes of the patient are very poor. Previous studies also suggest that in order to improve the oral health conditions among the children and adults, dependency of patients on health personnel should be decreased and patients should be encouraged to be responsible for their own health ¹⁴.

Similarly preventive approach should be emphasized over curative approach by improving the lifestyles especially in those living in rural areas. Community oriented oral health programs must be conducted ^{15, 16 and 17}. Another study in India indicated that overall behavior, attitudes and knowledge of oral health care among children and their parents needs improvements as results were not satisfactory enough. This requires health educations as well as improvement in socioeconomic conditions as these conditions are direct influence on the behavior and attitude of participants of the study ¹⁸.

Conclusion:

Although majority of the patients had good knowledge about health care but it was not associated with better attitudes, behavior and practicing of healthy habits. It can be suggested that poor socioeconomic conditions of majority of the public and lack of motivation for oral hygiene are the cause of poor behavior, attitude and practicing of dental care.

Conflict of interest:

There was no conflict of interest.

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