



Dental Counselling Practices and Barriers Perceived by Dental Practitioners in Northern Part of India: A Questionnaire Study

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Abstract

Introduction: Oral health is controlled by numerous different factors among which diet and nutrition is considered as an important component. Balanced diet has the power to improve dental health whereas, an unhealthy diet can lead to dental caries. This bidirectional relationship existing between oral health and diet makes it essential for dental practitioners to educate their patient about dietary health.

Aim: to evaluate the barriers which are perceived by the dental practitioners in guiding patients regarding their dietary habits in northern part of India.

Method: 1. A descriptive cross section study was carried out among 150 dental practitioners among whom 65 were undergraduates, 14 were pursuing MDS and 71 were practicing dentists.

2. Data was collected through questionnaire.

Results: According to the study only 26.7% of dental practitioner always provide dietary advice to their patients and remaining believe time insufficiency, lack of counselling skills, lack of knowledge, low patient literacy rate etc. act as barriers in providing dietary advice.

Conclusion: The present study concludes that majority of the dental practitioners rarely provide dietary advice which is due to perceived barriers such as lack of time, knowledge and counselling skills etc, which needs to be overcome to improve the delivery rate of dietary advice.

Keywords: Diet and nutrition, oral health, survey, counselling practices, dental, barriers perceived by dentists.

Introduction

Oral health influences the general health and quality of life. Dental disease can have negative impact on person's self esteem and their confidence to socialize, the dental problems also influences eating ability of a person, social anxiety and ability to work in social setting [1,2]. This in turn highlights the importance of public health approach to prevent the disease [3].

Oral health is controlled by various degrees of variables among which diet and nutrition is an important component which makes it necessary for the dental practitioner to educate their patients about healthy diet, so the dentist needs to have the necessary knowledge in regard to diet and nutrition [1].

Dental caries is a chronic disease affecting 60% to 90% of school going children and almost 100% adults [3]. However, dental caries is largely preventable by reduction in sugar intake and healthy eating pattern [6,7]. Moreover, the epidemiological evidence also suggests the direct relation between the dental caries and diet[4,5].The health conditions such as cardiovascular disease [8] ,diabetes and hypertension[9] get improved by intake of healthy diet. The vital role of dental practitioners in providing advice to patient regarding lifestyle has been accordingly recognised.

R Harris et al have provided evidence that there are behavioural changes seen among the patient and practitioners after giving one on one dietary instruction[10] . A recent study has been done by Frankie j et al shows that there are very few dentist providing nutritional counselling on regular basis and dietary advice provided is also very limited. Furthermore, when the dietary counselling is done; it is very brief and not specific and that is done without taking any dietary records.

So the aim of the present study was to evaluate the dietary counselling practices provided to the patients by the dental practitioners in northern part of India and also to analyse various barriers perceived by the dentist in guiding their patients regarding their dietary habits.

Materials and Methods

Study design

A descriptive cross sectional questionnaire based study design.

Inclusion criteria

Dental practitioners residing in northern part of India.

Registered dental practitioners in northern part of India with the at least bachelors in dental surgery (BDS)

Who give consent to be part of the study and dentist involved in dental care practices.

Exclusion criteria

Non registered practitioners.

Those who did not give consent.

Sample size

It is a duration best study which was carried out for 30 days. This study was carried out among 150 dental practitioners among whom 65 were undergraduates, 14 were pursuing MDS and 71 were practicing dentists.

Data collection

Data was collected with the help of pre structured close ended and prevalidated questionnaire consisting of 15 questions. The questionnaire consists of 3 parts -:

The first part consisted of 5 questions regarding social demography, for instance questions like name, age, gender, work experience and education level etc.

The second part consisted of practice based question in relation to confidence among the dentists regarding giving dietary advice.

The third part consists of attitude based questions related to barrier in dentistry counselling practices perceived by dental practitioners.

The questionnaire was disseminated through physical mode to the respective dentists. The data was collected and tabulated using the Microsoft excel sheet. Frequency distribution and chi square statistical tests were done on the tabulated data using the IBM SPSS software version.

Results

Table 1

The majority of the (38.7%) participants belong to 18 to 25 years of age group, followed by 27.3% of 26-35 year age group and only 10% of the population was > 45 years of age.

Males in the present study were more than female (64% and 36% respectively).

Majority of (47.3%) the study participants were MDS staff and practitioners followed by BDS practitioners, lectures and interns (43.3%).

Almost 70% of the study participants were institutional dentist followed by 14% being employed by another dentist. Only 4% were part of multispecialty setting

	N (%)
Age group (year)	
18-25	58(38.7)
26-35	41(27.3)
36-45	36(2.0)
>45	15(10.0)
Gender	
Female	96(64.0)
Male	54(36.0)
Educational qualifications	
BDS	65(43.3)
Mds	71(47.3)
Pursuing MDS	14(9.3)
Years since practicing	
Less than 5 years	73(48.7)
5-10 years	29(19.3)
10-20 years	28(18.7)
>20 years	20(13.3)
Practice setting	
Employed	16(10.67)
Employed by another dentists	22(14.67)
Institutional dentists	105(70.0)
Part of multispecialty setting	7(4.67)

TABLE 1. Demographic and dental practice related characteristics of study population

Table 2

Among the study participants majority of them rarely included caries risk assessment as part of their daily screening process (44%) and rarely provided dietary advice (60.7%).

Around 49.7% were not confident in providing dietary advice whereas similar to it 49.3% were nearly confident.

Amongst 34% felt sometimes time insufficiency to be barrier in providing dietary advice.

Around 8% participants believed very often that lack of counselling skill to be barrier in providing dietary advice. While majority around 40.7% didn't believe lack of knowledge to be a barrier.

36.7% felt often that low patient literacy rate to be barrier and 29.3% sometime felt language to be hindrance in providing dietary advice.

Responses	N(%)
Is caries risk assessment part of your daily screening process?	
Always	63(42.0)
Sometimes	66(44.0)
Never	21(14.0)
How often do you provide dietary advice?	
Always	40(26.7)
Sometimes	91(60.7)
Never	19(12.7)
How confident are you to provide dietary advice?	
Very confident	74(49.3)
Not confident	15(10.0)
Not sure	61(49.7)
How often do you provide sugar scoring to your patients in your practice?	
Always	17(11.3)
Sometimes	77(51.3)
Never	56(37.3)
Do you provide dietary chart to your patients based on their sugar score?	
Always	9(6.0)
Sometimes	45(30.0)
Never	96(64.0)
Do you believe time insufficiency to be a barrier in providing dietary advice?	
Never	37(24.7)
Rarely	37(24.7)
Sometimes	51(34.0)
Often	15(10.0)

Very often	10(6.7)
Do you believe lack of counselling skills to be a barrier in providing dietary advice?	
Never	43(28.7)
Rarely	44(29.3)
Sometimes	39(26.0)
Often	12(8.0)
Very often	12(8.0)
Do you believe lack of knowledge to be a barrier in providing dietary advice ?	
Never	61(40.7)
Rarely	37(24.7)
Sometimes	30(20.0)
Often	12(8.0)
Very often	10(6.7)
Do you believe low patient literacy rate to be a barrier in providing dietary advice ?	
Never	26(17.3)
Rarely	35(23.3)
Sometimes	34(22.7)
Often	43(28.7)
Very often	12(8.0)
How often do you feel language to be a hindrance to you in providing dietary advice?	
Never	57(38.0)
Rarely	32(21.3)
Sometimes	44(29.3)
Often	14(9.3)
Very often	3(2.0)

Table 2. frequency distribution of study population on the basis of their responses to the questions related to dietary counselling

Table 3

The difference in response is based on year of practice and frequency are providing dietary advice ($p=0.53$) confidence in providing dietary advice ($P=0.6$), insufficiency of time as barrier ($P=0.19$), lack of knowledge ($P=0.19$) were found to be non significant.

Majority of the participants who had less than 5 years of experience believed lack of counselling skills to be barrier in providing dietary advice and the difference on the basis of years of experience was found to be significant ($p < 0.01$).

The difference of years of practice and belief in low patient literacy rate to be a barrier in providing dietary advice was found to be highly significant (p = 0.001)

Questions	Responses	years since practicing				Chisquare value	P value
		Less than 5 years	5-10 years	10-20 years	>20 years		
How often do you provide dietary advice?	Always	16	10	9	5	5.15	0.53
		21.90%	34.50%	32.10%	25.00%		
	Sometimes	49	17	14	11		
67.10%		58.60%	50.00%	55.00%			
Never	8	2	5	4			
	11.00%	6.90%	17.90%	20.00%			
How confident are you in providing dietary advice?	Very confident	34	13	13	14	4.57	0.6
		46.60%	44.80%	46.40%	70.00%		
	Not confident	7	3	4	1		
9.60%		10.30%	14.30%	5.00%			
Not sure	32	13	11	5			
	43.80%	44.80%	39.30%	25.00%			
Do you believe time insufficiency to be a barrier in providing dietary advice?	Never	13	9	7	8	16.13	0.19
		17.80%	31.00%	25.00%	40.00%		
	Rarely	17	9	9	2		
		23.30%	31.00%	32.10%	10.00%		
	Sometimes	26	7	11	7		
35.60%	24.10%	39.30%	35.00%				
Often	10	4	0	1			
	13.70%	13.80%	0.00%	5.00%			
Very often	7	0	1	2			
	9.60%	0.00%	3.60%	10.00%			
Do you believe lack of counselling skills to be a barrier in providing dietary advice?	Never	14	3	15	11	40.81	<0.01*
		19.20%	10.30%	53.60%	55.00%		
	Rarely	19	18	3	4		
		26.00%	62.10%	10.70%	20.00%		
	Sometimes	22	7	7	3		
30.10%	24.10%	25.00%	15.00%				
Often	8	1	2	1			
	11.00%	3.40%	7.10%	5.00%			
Very often	10	0	1	1			
	13.70%	0.00%	3.60%	5.00%			
Do you believe lack of knowledge to be a barrier in providing dietary advice?	Never	27	8	17	9	15.96	0.19
		37.00%	27.60%	60.70%	45.00%		
	Rarely	20	9	3	5		
27.40%		31.00%	10.70%	25.00%			
Sometimes	14	6	6	4			
	19.20%	20.70%	21.40%	20.00%			

Table 3. cross tabulation of dental practice experience wise difference in terms of dietary counselling conceptualization and perceived barriers among study population

Discussion

The importance of diet and nutrition have always been stressed upon by the professionals from various fields. Yet, not many studies have been conducted regarding the counselling practices adopted by the dentists and barriers perceived by them to counsel the patients about the diet and nutrition. Therefore the present study was conducted to assess the knowledge of dentists towards the importance of imparting the dietary advice to the patients and the various barriers faced by the dental professionals regarding the same [1]. The study concluded that 60.7% of the dentists rarely provide dietary advice; this low rate of dietary counselling practice pattern is consistent with previous studies.

According to the present study, the insufficient time is perceived by various dentists as the frequent barrier to provide dietary advice. This was in accordance with the study done by the Japanese dentists³. The shorter appointment time is considered favourable as it equivalent to more patients being seen. Further investigations into the efficient dietary advice strategies that can be implemented for dentists are needed to help overcome this barrier. The current study revealed lack of knowledge as one of the barrier to provide dietary advice. So, it is essential that dental professionals regularly assess the available resources in order to provide clear and comprehensive dentistry advice.

In the current study, the low patient literacy rate and language is considered as a hindrance to provide dietary advice. These results are comparable to a study of primary care practitioner which identified lack of patient's compliance as a barrier [13], in providing dietary advice it has been suggested that whilst health care providers play a vital role in assisting patients healthy behaviour changes, a lack of understanding of how behaviour change ;can often result in patient non compliance. [14]

In the present study, the lack of confidence and experience has been seen as one of the frequently encountered barrier by the dental practitioner while providing the dietary advice this was in accordance with the other studies [11]. Continuing developments programs regarding same should be conducted frequently. By increasing the availability of such courses, the confidence of practitioners in their counselling skills may increases which will in turn potentially increase the delivery rate of dietary advice [12].

Conclusion

A multitude of barriers perceived by dentists preventing the delivery of dietary advice can be prevented by creating strategies to overcome these barriers and improve the delivery rate of dietary advice. the

incorporation of effective dietary counselling methods in UG/PG curriculum by council or Authorities should be done.

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