

Internet Usage to Access Oral Health Related Information by Patients Reporting to Our Institution- A Cross Sectional Study

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Abstract

Introduction: Widespread internet usage worldwide allows increased access to medical and dental information and can be used for patient self-education. **Materials and Methods:** Patients who were reported to the Department of Oral Medicine of Vinayaka Missions Sankarachariyar Dental College were involved in the present study. Institutional Ethical clearance was obtained. Consent was obtained from all the participants and a Questionnaire was given to all the participants. The participants were given a list of predetermined responses to choose their answer. **Results:** Results were calculated. Statistical analysis was done using Chi square test and p value was calculated. **Conclusion:** We may conclude that creating awareness amongst people of different educational backgrounds through appropriate means (following an individualized approach based on educational qualification) would increase internet usage for acquiring information on oral health.

Keywords: Dentistry, Internet Usage, Oral Health Information, Survey

1. Introduction

Wide spread internet usage worldwide allows increased access to medical and dental information and can be used for patient self-education. However, there is little evidence about how the internet is impacting dentistry. This survey was conducted to determine how dental patients in the Department of Oral Medicine of Vinayaka Missions Sankarachariyar Dental College, use it as a source of information on oral health and to discover how it affects oral hygiene practices of patients.

2. Materials and Methods

Patients who were reported to the Department of Oral Medicine of Vinayaka Missions Sankarachariyar Dental College were involved in the present study. Institutional Ethical clearance was obtained. Consent was obtained

from all the participants and a Questionnaire was given to all the participants. The participants were given a list of predetermined responses to choose their answer.

Sample size was calculated as 60. Persons involved in the study were divided into three groups. Persons with no formal education, persons with education below 10th standard and persons who have attended college were the three different groups and there were 20 in each group.

3. Aim and Objectives

- To assess the awareness about internet and social media among patients reporting to our institution.
- To assess the frequency, purpose and benefit of internet usage on oral health related information.
- Frequency of dental visits of the patients.
- To identify the mode of taking appointment for dental visit.

- To assess the sources of information about oral health related information.
- To correlate Age, Sex, Location and the educational status among the internet users.

3.1 Inclusion Criteria

Subjects who are willing to participate in the study was the inclusion criteria. Persons of both sexes between 20 to 60 years were included. Mentally retarded patients, medically compromised patients and children were excluded.

Uneducated group had persons who have never attended school. Criteria for the group of basic education was tenth standard and that of highly educated was those who have attended college.

QUESTIONNAIRE

- 1) NAME:
- 2) AGE:
- 3) SEX: M / F
- 4) PLACE: Rural / City
- 5) EDUCATIONAL STATUS: No formal education / below 10th standard / Attended College

- 6) Do you have internet knowledge and have ever used internet? Yes/No
- 7) Purpose for which you use internet. E-mail / Whatsapp / Facebook / Google / All of these
- 8) Do you use internet for medical and dental purpose? Yes / No
- 9) When you or your family member experience a dental pain, what will you do?
Visit a dentist / Go to medical shop / Search about in on the internet for drug
- 10) How often do you visit a dentist? Once in 6 months / Once in an year / Rarely
- 11) How do you make an appointment with your dentist? Phone calls / Online booking / Go without an appointment
- 12) Have you ever felt that the information from the internet is different from the ones given by the dentist? Yes / No
- 13) Is the information gained from the internet regarding dental problems beneficial to you in anyway? Yes / No

3.2 Statistical Analysis

TABLE 1. When the purpose of internet usage was compared with age, place and educational status using Chi square test, it was found to be highly significant and with sex it was not significant

		Purpose for which use internet						Total	Chi square	p
		Never		Google		Whatsapp				
		N	%	N	%	N	%			
Age	Up to 25	3	14	18	82	1	5	22	32.81	< 0.001**
	26 - 35	4	25	10	63	2	13	16		
	36 - 45	4	57	2	29	1	14	7		
	Above 45	15	100					15		
Sex	Male	13	38	19	56	2	6	34	1.09	0.581
	Female	13	50	11	42	2	8	26		
Place	City	3	11	22	79	3	11	28	22.75	< 0.001**
	Rural	23	72	8	25	1	3	32		
Educational Status	No Formal Education	20	100					20	46.15	< 0.001**
	Below 10th standard	5	25	15	75			20		
	Attended College	1	5	15	75	4	20	20		
Total		26	43	30	50	4	7	60		

Table 2. When the number of visits of patients to dentist was compared with age, place and educational status using Chi square test, it was found to be significant and with sex it was found to be not significant

		How often do you visit a dentist										Total	Chi square	P
		Never		Rarely		Once in 6 months		Once in a month		Regularly				
		N	%	N	%	N	%	N	%	N	%			
Age	Up to 25	4	18	10	45	7	32	1	5			22	21.80	0.040*
	26 - 35	1	6	6	38	4	25	4	25	1	6	16		
	36 - 45	2	29	3	43	1	14			1	14	7		
	Above 45	6	40	9	60							15		
Sex	Male	9	26	12	35	8	24	4	12	1	3	34	4.64	0.326
	Female	4	15	16	62	4	15	1	4	1	4	26		
Place	City	3	11	9	32	10	36	5	18	1	4	28	17.49	0.002**
	Rural	10	31	19	59	2	6			1	3	32		
Educational Status	No Formal Education	8	40	10	50	1	5	1	5			20	13.60	0.093
	Below 10th standard	3	15	7	35	6	30	2	10	2	10	20		
	Attended College	2	10	11	55	5	25	2	10			20		
Total		13	22	28	47	12	20	5	8	2	3	60		

Table 3. When the type appointment taking with dentist was compared with age, sex and educational status using Chi square test, it was not significant and with place it was significant

		Appointment with dentist				Total	Chi square	P
		Go without an appointment		Phone calls				
		N	%	N	%			
Age	Up to 25	18	82	4	18	22	3.70	0.296
	26 - 35	15	94	1	6	16		
	36 - 45	6	86	1	14	7		
	Above 45	15	100			15		
Sex	Male	29	85	5	15	34	1.93	0.165
	Female	25	96	1	4	26		

Place	City	23	82	5	18	28	3.60	0.058*
	Rural	31	97	1	3	32		
Educational Status	No Formal Education	20	100			20	4.44	0.108
	Below 10 th standard	18	90	2	10	20		
	Attended College	16	80	4	20	20		
Total		54	90	6	10	60		

Table 4. When the internet awareness was correlated with age, place and educational status using Chi square test, it was found to be highly significant and with sex, it was not significant

		Have internet knowledge and have ever used internet				Total	Chi square	p	
		Yes		No					
		N	%	N	%				
Age	Up to 25	19	86	3	14	22	30.25	< 0.001**	
	26 - 35	12	75	4	25				16
	36 - 45	3	43	4	57				7
	Above 45			15	100				15
Sex	Male	21	62	13	38	34	0.83	0.362	
	Female	13	50	13	50				26
Place	City	25	89	3	11	28	22.75	< 0.001**	
	Rural	9	28	23	72				32
Educational Status	No Formal Education			20	100	20	40.86	< 0.001**	
	Below 10th standard	15	75	5	25				20
	Attended College	19	95	1	5				20
Total		34	57	26	43	60			

Table 5. When the frequency of internet usage for oral health information was compared with age, place and educational status using Chi square test, it was highly significant and with sex it was not significant

		Frequency of using internet for medical and dental purpose								Total	Chi square	P	
		Never		Once a week		Once a month		Once a year					
		N	%	N	%	N	%	N	%				
Age	Up to 25	5	23	6	27	5	23	6	27	22	24.84	0.003**	
	26 - 35	6	38	3	19	4	25	3	19				16
	36 - 45	5	71	1	14			1	14				7
	Above 45	15	100										15
Sex	Male	17	50	6	18	5	15	6	18	34	0.14	0.987	
	Female	14	54	4	15	4	15	4	15				26

Place	City	6	21	8	29	7	25	7	25	28	19.44	< 0.001**
	Rural	25	78	2	6	2	6	3	9	32		
Educational Status	No Formal Education	20	100							20	39.74	< 0.001**
	Below 10th standard	9	45	2	10	6	30	3	15	20		
	Attended College	2	10	8	40	3	15	7	35	20		
Total		31	52	10	17	9	15	10	17	60		

Table 6. When internet usage during dental pain was compared with place and educational status, it was found to be highly significant and with sex and age it was not significant

		Do when experience dental pain						Total	Chi square	P
		Go to medical shop		Visit a dentist		Search about in on internet				
		N	%	N	%	N	%			
Age	Up to 25	6	27	10	45	6	27	22	8.39	0.211
	26 - 35	5	31	8	50	3	19	16		
	36 - 45	2	29	5	71			7		
	Above 45	8	53	7	47			15		
Sex	Male	10	29	19	56	5	15	34	1.25	0.536
	Female	11	42	11	42	4	15	26		
Place	City	4	14	17	61	7	25	28	11.14	0.004**
	Rural	17	53	13	41	2	6	32		
Educational Status	No Formal Education	11	55	9	45			20	8.98	0.052*
	Below 10th standard	6	30	9	45	5	25	20		
	Attended College	4	20	12	60	4	20	20		
Total		21	35	30	50	9	15	60		

Table 7. When the sources of information on oral health issues are compared with age, sex, place and educational status using Chi square test, it was not significant

		Source of information about dental issues						Total	Chi square	p
		Dentist		Friends, Family		Internet				
		N	%	N	%	N	%			
Age	Up to 25	8	36	13	59	1	5	22	2.03	0.917
	26 - 35	6	38	10	63			16		
	36 - 45	2	29	5	71			7		
	Above 45	5	33	10	67			15		
Sex	Male	12	35	21	62	1	3	34	0.80	0.671
	Female	9	35	17	65			26		
Place	City	11	39	16	57	1	4	28	1.74	0.420
	Rural	10	31	22	69			32		
Educational Status	No Formal Education	8	40	12	60			20	3.07	0.547
	Below 10 th standard	5	25	14	70	1	5	20		
	Attended College	8	40	12	60			20		
Total		21	35	38	63	1	2	60		

Table 8. When the benefit of information from internet regarding oral health issues was compared with age, sex, place and educational status using Chi square test, with educational status, it was found to be highly significant and with age, sex and place it was not significant

		Is the information gained from the internet regarding dental problems , beneficial to you in any way				Total	Chi square	p
		Yes		No				
		N	%	N	%			
Age	Up to 25	11	65	6	35	17	0.31	0.858
	26 - 35	7	70	3	30	10		
	36 - 45	1	50	1	50	2		
Sex	Male	11	65	6	35	17	0.01	0.913
	Female	8	67	4	33	12		
Place	City	14	64	8	36	22	0.14	0.706
	Rural	5	71	2	29	7		
Educational Status	Below 10 th standard	10	91	1	9	11	5.06	0.025*
	Attended College	9	50	9	50	18		
Total		19	66	10	34	29		

Table 9. When benefit gained through internet on oral health issues were compared with age, sex and place, it was not significant and with educational status it was significant

		Is the information gained from the internet regarding dental problems, beneficial to you in any way				Total	Chi square	p
		Yes		No				
		N	%	N	%			
Age	Up to 25	11	65	6	35	17	0.31	0.858
	26 - 35	7	70	3	30	10		
	36 - 45	1	50	1	50	2		
Sex	Male	11	65	6	35	17	0.01	0.913
	Female	8	67	4	33	12		
Place	City	14	64	8	36	22	0.14	0.706
	Rural	5	71	2	29	7		
Educational Status	Below 10th standard	10	91	1	9	11	5.06	0.025*
	Attended College	9	50	9	50	18		
Total		19	66	10	34	29		

4. Results

When the internet awareness was correlated with age, place and educational status using Chi square test, it was found to be highly significant and with sex, it was not significant. When the frequency of internet usage for oral health information was compared with age, place and educational status using Chi square test, it was highly significant and with sex it was not significant. When internet usage during dental pain was compared with place and educational status, it was found to be highly significant and with sex and age it was not significant. When the sources of information on oral health issues are compared with age, sex, place and educational status using Chi square test, it was not significant. When the benefit of information from internet regarding oral health issues was compared with age, sex, place and educational status using Chi square test, with educational status, it was found to be highly significant and with age, sex and with place it was not significant. (Table 1 to Table 9)

5. Discussion

Chestnutt et al. have described the impact of the Internet on dentistry as positive but have also concluded that it has not fully realised its potential. The present study showed

that awareness, frequency and usage of internet was more in patients coming from city and with patients who have studied in college¹. Naganandini et al reported that low socioeconomic status and a low educational level act as barriers to using the internet. Our study showed positive correlation of internet usage with educational status².

Aydin et al., reported from Turkey that those in the 25- to 34-year age group who were married, employed, and who have a university degree and were much more likely to seek health information on the Internet than their counterparts³. Our study also showed that age, place and educational status were correlated with internet usage.

Harris et al., reported that the patients attending student dental hygiene clinics make little use of the Internet for oral health information¹. However, reported interest in future access is such that dental professionals should develop and harness the potential of the Internet as an educational resource.

6. Conclusion

We may conclude that creating awareness amongst people of different educational backgrounds through appropriate means (following an individualized approach based on educational qualification) would increase internet use for acquiring information on oral health. Confirmation

of the results can be obtained by study of more number of patients in all three categories.

7. References

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