

# Perceptions Of How the Internet Has Impacted on Dentistry

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## ABSTRACT:

**Introduction:** The use of internet has become universal that it has become a basic necessity in day to day life. The aim of this study is to get an insight on how the internet has affected dentistry. It also focuses on the patients understandings towards the use of internet regarding their oral health queries and dentist perception towards the use of internet in clinical practice. **Material & Method:** This is a cross sectional study conducted, which consists of questionnaire, distributed among 300 undergraduate, postgraduate students, and dental practitioners and collected data were analyzed. **Result:** Among the participants 85.7% were undergraduates and 14.3% postgraduate dentists. Out of them 37% dentist don't think that conventional media is best to communicate with patients and 38.4% dentist think dentist should communicate with the patient more through social media. 40.1% dentist believe that internet information regarding the disease ruins the patient dentist relationship while 30.3% thinks it's beneficial to the dentist.

**Conclusion:** The impact of internet can be considered high amid both the patients and dentists. Also it affects the decision making process of patients offering a new challenge to the dentist.

## INTRODUCTION

The internet has enormous potential to influence people's lives in social, cultural and educational aspects. <sup>2</sup> The expansion of the internet has become one of the greatest advances in our ability to communicate and spread knowledge. <sup>5</sup> All around the globe the use of Internet as a source of information has had a major impact on dentistry and also causing obvious effects on dentist - patient relationship. <sup>3</sup>

This service provides ample amount oral health information to patients as well as dentists. It also influences and educates the patient to become more acquainted with their dental hygiene. This encourages the patients to seek professional help concerning the dental issues.

As for dentists it serves as a platform to explore advances in dentistry and various treatment options. Internet helps dentists to aid in better understanding of patients through video demonstrations as many patients fail to fully understand information provided by the dentist in the clinic.

Due to Internet most of the patients have already know base of their illness which make patients more agreeable & assured with their dentist which in turn makes it easy for dentists to deal with them.

The internet is a double edged sword, as sometimes it may prove disadvantageous to dentists. The change in patients attitude and behavior towards dentists is the major impact of the internet.

Internet is a handy resource for the patient to obtain oral health information, but patients may interpret this information falsely leading to the self diagnosis, self medications or treatments. So the dentists need to be ready to cope up with such patients and be capable of removing their doubts and give them proper guidance.

Patient with the information acquired from internet is more likely to have more queries and demanding more complex or unprofessional care which can lead to disagreement on the treatment plan resulting in dispute between dentist and patient which affects negatively on the their relation. <sup>3</sup>

The information from the different websites regarding the dental treatment vary. Several studies suggested that some dental websites are very difficult to read and understand & contain inaccurate & insufficient information. The quality and reliability of websites cannot be assessed by patients as most of the information is for the advertisement purpose. <sup>1</sup>So, There is a need for better communication between dentists and patients to increase awareness about oral health by suggesting reliable web resources with accurate information that will lower the chances of malinformation.

Now patients are acquiring more dominant role and are less likely to play a passive & dependent role in the treatment planning. <sup>4</sup> So it has become a major concern to dentists to assure some patients with their treatment outcome while some patients may prove more cooperative. Thus internet is affecting dentist-patient relationship both positively and negatively.

Hence, present study is conducted to evaluate the perception of how internet has impacted on dentistry.

## METHODOLOGY :

The present study has been designed as descriptive cross sectional study utilizing a self administered questionnaire that was developed and disseminated digitally through Maharashtra institute of dental science and research, Latur, Maharashtra.

A total of 10 questions were designed to evaluate the perception of how the internet has impacted on dentistry. The questionnaire was in the form of multiple choice question and yes/no questions.

the target population of present study were undergraduate, postgraduates and dental practitioners. A total of 302 dental students and practitioners participated out of which 256 were undergraduates and remaining postgraduates.

**ETHICAL APPROVAL:** The Institutional Ethics Committee of the Maharashtra Institute of Dental Science and Research, Latur under Registration No. MIDS/IEC/STU/837/104/2022 approved the study.

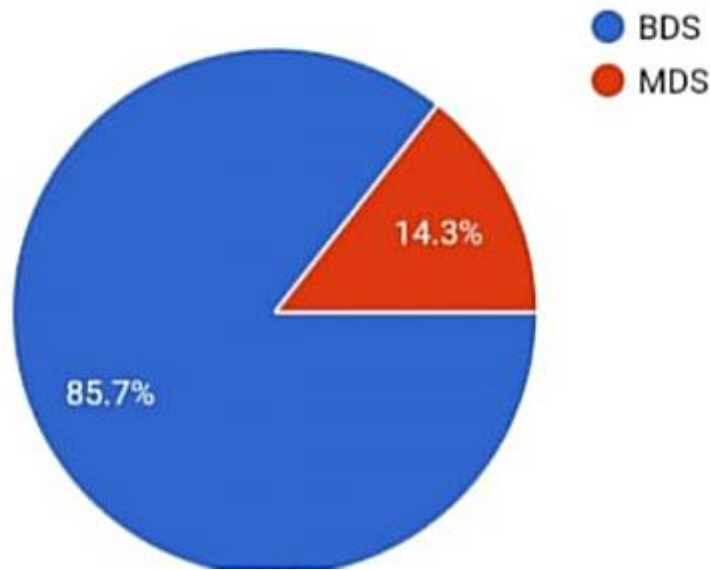
**INFORMED CONSENT:**

The participants were informed that their participation in the study’s questionnaire was entirely on a voluntary basis before they responded. The formal informed consent was waived by the Institutional Ethics Committee.

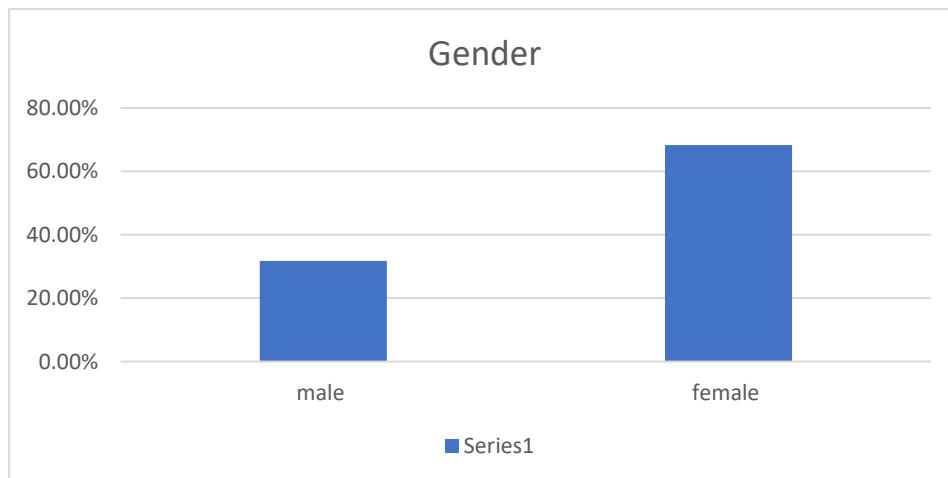
**RESULT :**

Total of 302 participants were invited to respond to the questionnaire which included undergraduates, postgraduates and

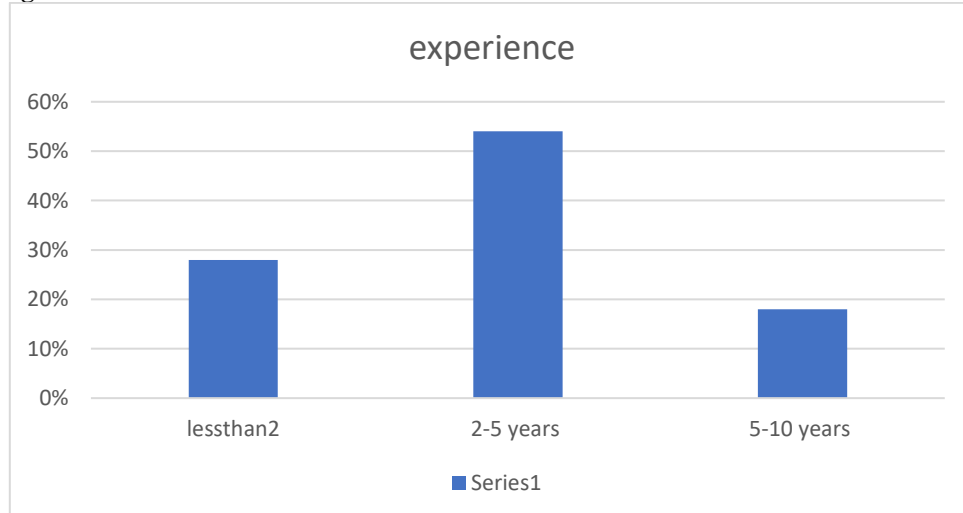
**Fig :1 STUDY PARTICIPANTS**



dental practioners. Out of 302 participants 85.7% were BDS and remaining were MDS (14.3%). Among the 302 practioners , 54% have been practicing since 2-5 years while 28% of them have less than 2years of experience whereas the remaining 18% have been working in this field for 5-10 years. Majority of the participants were female ( 68.3%) and remaining (31.7%) were males.



**Fig2: PERCENTAGE OF DEMOGRAPHIC VARIABLES REALTED TO GENDERS**



**Fig3: EXPERIENCE OF STUDY PARTICIPANTS (IN YEARS)**

**Table 1 : percentage analysis of “Yes or No” responses of study participants according to their knowledge**

Sir no	Question	Total responses	Yes	No
1	Do you upload before and after pictures of the treatment and does it benefit you?	301	67.1%	32.9%
2	Do your patients trust the information they get from internet about dentistry and treatment options?	299	79.9%	20.1%
3	Does information gained from internet has led to the patients demanding inappropriate care or more complex treatment?	298	69.5%	30.5%
4	Do you take help from internet regarding information about the advanced dental procedures ?	299	74.9%	25.1%
5	Do you feel knowledge gained only through internet sources are sufficient to perform new advanced dental procedures?	300	33.7%	66%

Table 1

Some practioners (67.1%) do upload before and after pictures of the treatment which benefits them in practice which the other (32.9%) don't . 33.7% dentists feel that knowledge gained only through internet sources are sufficient to perform new advanced dental procedures and on the other hand, 66% believe that internet as such is not sufficient. Some participants (74.9% ) use the internet for learning advanced dental procedures , while remaining don't .

**Table 2 : percentage analysis of “yes, No and some “ responses of study participants According to their attitude**

Sr No	Question	Total responses	Yes	No	Some
1	Were you successful in removing the assumptions which patients had due to internet?	299	42.5%	29.4%	28.1%

2	Do you view internet as a threat to the dentist-patient relationship?	297	40.1%	30.3%	29.6%
3	Do you think dentists should communicate with the people more through social media rather than conventional media?	297	38.4%	37%	24.6%

Table 2

The above table shows that 42.5% dentist were successful in removing the assumption which patient had due to internet while 39.4% were unsuccessful, and 28.1% were successful to some extent. Responses shows that 38.4% dentist think that they should communicate with the patients more Through social media rather than conventional, 37% dentist prefer conventional media while 24.6% participants think that to some extent social media is best to communicate than conventional .

40.1% participants believe internet as a threat to the dentist patient relationship while 30.3% don't . Although 29.6% dentist think that sometimes dentist patient relationship hamper due to internet.

**Table 3 : percentage analysis of “ less half and more” response of study participants according to their practice**

Sr no	Question	Total responses	Less	Half	More
1	How many of your patients follow internet advices prior to the treatment?	299	42.8%	44.1%	12.7%

Table 3

**Table 4 : percentage analysis of “ yes greatly, not really, to some extent, don't have any social media page” response of study participants**

This table shows most of the dentists have social media page and among them 39.7% thinks that it benefits their practice while 12.7% have no social media page

Sr no	Question	Total responses	Yes greatly	Not really	To some extent	Don't have any social media page
1	Do you have any page on social media? If yes, does it affect your practice?	300	39.7%	31.3%	16.3%	12.7%

Table 4

**DISCUSSION:** In recent years, internet usage has been surged worldwide. It is considered as significant source of knowledge and health information . Dentists have also accepted the significance of internet as the data and knowledge gained from the internet proves to be beneficial for both patients and dentists.

In present study, among the 302 participants surveyed 44.1% dentists answered that less than 50%of patients do followed internet advices prior to the treatment which shows similar results to the studies done by Payal Chandwani, Rohan Sachdev , kriti Garg Internet is a double edged sword as it has both pros and cons.

survey shows that 40.1% of participants view internet as threat to dentist patient relationship as most of the dentists find it difficult to handle the patients who demands inappropriate care due to information gained from the internet that cause higher expectations. while around 60% of the dentists have shown positive response stating that internet usage by the patients can be beneficial , as it is easy to converse and guide preinformed patients.

Participants seem to be using internet for their own professional purposes and to improve their clinical knowledge by referring to fellow dentists research papers.

In accordance with several studies the result of this study confirms that internet has impacted on dentistry with both supporting and opposing arguments.

#### **CONCLUSION:**

The knowledge and information gained from the internet is crucial for both dentists and patients but its effects may vary. Many dentists are convinced that they should communicate with the people More through conventional media rather than social media

however some believe that preinformed patients are easy to handle. To more extent internet helps in attracting more patients through social media posts.

This study concludes that impact of internet on dentistry is more positive but there are some drawbacks which needs to be understood.

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#### Questionnaire:

1.Do you have any page on social media? If yes, does it affect your practice?

Yes, greatly

Not really

To some extent

Don't have any social media page

2.Do you upload before and after pictures of the treatment and does it benefit you?

Yes

No

3.How many of your patients follow internet advices prior to the treatment?

Less

Half

More

4.Do your patients trust the information they get from internet about dentistry and treatment options?

Yes

No

5.Does information gained from internet has led to the patients demanding inappropriate care or more complex treatment?

Yes No

6.Were you successful in removing the assumptions which patients had due to internet?

Yes

No

Some

7.Do you view internet as a threat to the dentist- patient relationship?

Yes

No

Sometimes

8.Do you think dentists should communicate with the people more through social media rather the conventional media?

Yes

No

To some extent

9.Do you take help from internet regarding information about the advanced dental procedures ?

Yes

No

10.Do you feel knowledge gained only through internet sources are sufficient to perform new advanced dental procedures?

Yes

No