

Awareness and Knowledge among Dental Students on 'Idiot Syndrome' across various Dental Institutions in Andhra Pradesh - An Online Survey.

Dr. D. Sudha Madhuri¹, Dr. B. Lakshmana Rao^{2*}, Dr. Narayana Chava³, Dr. M. Vaishnavi Devi⁴,
Dr. K. Sudheer⁵, Dr. A. Harika⁶

¹Prof & HOD, Dept of Prosthodontics, Govt Dental College and Hospital, Kadapa, Andhra Pradesh, India,
Email: drdsm75@yahoo.com

^{2*}Prof & HOD, Dept of Prosthodontics, Lenora institute of Dental Sciences, Rajahmundry, Andhra Pradesh, India,
Email: kushulubathala@gmail.com

³Reader, Dept of Prosthodontics, SB Patil Institute of Dental Sciences & Research, Bidar, Karnataka, India,
Email: nari.chava@gmail.com

⁴Professor, Dept of Oral and Maxillofacial Surgery, Lenora institute of Dental Sciences, Rajahmundry, Andhra Pradesh, India,

Email: vaishnavidevimajeti@gmail.com

⁵Professor, Dept of Prosthodontics, Lenora institute of Dental Sciences, Rajahmundry, Andhra Pradesh, India,

Email: dr.sudheer17@gmail.com

⁶Senior Lecturer, Dept of Prosthodontics, Lenora institute of Dental Sciences, Rajahmundry, Andhra Pradesh, India.

Email: harikavarma776@gmail.com

***Corresponding Author:** Dr. B. Lakshmana Rao

*Email: kushulubathala@gmail.com

ABSTRACT

Background: In this digital era, the usage of internet and advanced cutting-edge technology is spreading in nook and corner of the world. Day by day new internet problems are taking birth and creating lot of issues. All the dental fraternity including interns and P.G. Student community should be aware of the negative side of these improper handling of internet and technology.

Objective: The present research focused on awareness and understanding of Interns and Post-Graduate Students of various dental institutions in Andhra Pradesh, India, regarding the latest problem, Internet Derived Information Obstruction & Treatment (IDIOT Syndrome).

Methods: Using a pre-designed and pre-tested Questionnaire that includes 12 questions on various aspects regarding awareness and knowledge of Idiot Syndrome and was sent to dental college students (Interns and PG students) through various social media platforms, using Google Forms from October 30, 2024, to December 30, 2024, in the state of Andhra Pradesh, India. Collected data was transferred to Excel sheets, and Descriptive Statistical analysis was performed using IBM SPSS Software ver.26 (SPSS Inc., Chicago, IL, USA), and descriptive tables and charts were generated. Its statistical significance was set at $P \leq 0.05$.

Results: A total of 280 responses were received. Interns participated in greater numbers (148) than P.G. Students (132). Among the total participants (280), the female percentage (77.9%) was more than the male participation (22.1).

Conclusion: An average of 50% P.G. Students were aware and having knowledge on Idiot Syndrome in dentistry, whereas 43% of Interns were aware and having knowledge. A sizable portion of the P.G. Students (59%) were not aware of cyberchondria.

Key Words: Internet Derived Information Obstruction Treatment (IDIOT Syndrome); Cyberchondria; Online Medical Information; Internet Search.

INTRODUCTION

The term "Internet-Derived Information Obstruction Treatment" Syndrome (IDIOT Syndrome) describes a condition in which people are overloaded, perplexed, or misinformed by a lot of contradicting information they

find online. This is a light-hearted word used to define a situation when someone finds it difficult to comprehend, critically analyse, or effectively use online information, which frequently results in poor decision-making or confusion. [1-3]

Other name for IDIOT syndrome is cyberchondria, which is characterized by a refusal to seek expert counsel, a reliance only on internet information regarding oral health care, and the abrupt cessation of recommended treatment or self-prescription medicine. Due to placing too much dependency on online oral health information, these individuals have excess anxiety. [1]

Idiot syndrome is not a formal medical or psychological diagnosis. This is a clinical phenomenon occurs when frequent internet searches for medical information led to excessive concerns about one's physical health. [4-6]

The emanation of Idiot Syndrome may depend on various factors which include cognitive factors and physiological factors which reflects on patient's attitude and results in weak decision- making. The impetuous attitude is the result of over belief on health information available in the internet and finally landing with self-diagnosis of a problem and start taking self-medication. [7]

Although IDIOT Syndrome is not a recognised condition in dentistry, it does draw attention to a serious problem like how patients' expectations and actions are influenced by false information from the internet content. It is crucial for dental professionals to proactively address these issues as the field develops by educating patients, keeping up with best practices, and encouraging critical thinking about dental information found online. An infodemic occurs when too much information about an issue, which is usually erroneous, spreads quickly and makes finding a solution more challenging.

Despite the fact that IDIOT Syndrome is not a recognized diagnosis in dentistry, it does highlight a significant issue, such as how patients' expectations and behavior are impacted by inaccurate information found online. As the field advances, it is imperative that dental professionals take proactive measures to address these problems by educating patients, staying current with best practices, and promoting critical thinking regarding dental information that can be accessed online. An infodemic happens when an excessive amount of information—typically inaccurate—about a problem travels swiftly and makes it more difficult to identify a solution. [8]

General Symptoms Includes:

Information Overload: People may find it difficult to concentrate on crucial details due to the overwhelming amount of information available online.

Confusion or Misunderstanding: People may find it difficult to comprehend or make sense of what they are reading or hearing as a result of contradicting or conflicting information.

Filtering Reliable Sources: Having trouble telling trustworthy information from biased, misleading, or untrustworthy sources.

Dependency on Internet Advice: Avoid excessive reliance on online diagnoses or solutions, ignoring the specialist suggestions.

Despite of the fact that, in the dental literature, there is no mention of the expression 'Idiot Syndrome', but it is used as non-literacy word, which expresses the problems arrived because of deceitful and erroneous online origin of dental health information

METHODOLOGY

Participants in this descriptive cross-sectional study included Interns and Post Graduate Students [P.G. Students] from various dental colleges in Andhra Pradesh. We developed a 12-question self-administered questionnaire for the current investigation [Annexure-I] after searching the literature. We used Google Forms to collect data online. Among the many benefits of these Google forms is their capacity to evaluate and deliver real-time statistics while maintaining participant anonymity. This preserves participant privacy when completing the forms and enables the researcher to make inferences. Another benefit is that the Google Forms allow anyone to monitor the participants' responses.

Concerning the questionnaire's validation:

1. The questionnaire's face validity was verified following discussions with other teaching faculty members, 2. We created the questionnaire. We received assistance from a qualified and experienced person and 3. Several interns and P.G. Student members participated in a pilot study that was conducted at random.

It's a descriptive cross-sectional study that included Interns and Post Graduate Students [P.G. Students] from various dental colleges in Andhra Pradesh. A pre-designed and pre-tested Questionnaire was used and sent to multiple institutions through institutional and personal emails as well as social media using Google Forms,

and finally, 280 responses were received from the participants. The questionnaire includes Demographic details, and twelve questions related to knowledge and awareness about IDIOT Syndrome in Dentistry. The study was conducted for 3 months, from October 30th, 2024, to December 30th, 2024. Prior ethical clearance was obtained from the Institutional Ethical Board (File No.13/IEC/LIDS/Faculty/2024, Dated: 04/09/2024). The collected data were statistically analyzed and tabulated using IBM SPSS Ver 26. The generated results were represented using Graphs and Tables.

Study Design

This is a descriptive cross-sectional study.

Study Population

Interns and P.G. Students from various dental institutions across Andhra Pradesh

Sampling Criteria

Purposive Sampling.

Study Instrument

A pre-made and verified closed-ended questionnaire was sent via Google Forms. Thirty people participated in a pilot study. From October 30, 2024, to December 30, 2024, the questionnaire was sent to participants in various dental institutions in Andhra Pradesh via institutional and personal emails as well as social media. The Participants provided 280 responses in total. We gathered and moved the data to a Microsoft Excel document after receiving it. We conducted the descriptive statistical analysis using IBM SPSS version 26.

RESULTS

First Set- Demographic Details

Two designations participated in the study, one is Interns and other is Post Graduate Students (P.G. Students).

Table I, Figure-1 & Figure-2: Shows the details of Designation and Gender. Among 280 participants, 132 were Post Graduate students, and 148 were Interns. The females are higher in number than males in both post-graduates 94 (71.2%) and interns 124 (83.8%)

Table-II: Portrays the awareness levels among the participants. 54.7% of students reported that they were aware of the term IDIOT Syndrome than Intern students (42.5%), whereas the Interns (49.5%) were aware of the term Cyberchondria than Postgraduate students (41%).

When it comes to 'excessive time spent online for medical information which is one of the symptoms of idiot syndrome, more than half of P.G. Students [54.7%] were having awareness, compared to interns, who fall about 45.3% only. Also 51.8% of P.G. Students, were aware of 'undesired and compulsive internet search for medical knowledge which is another symptom of idiot syndrome. Unfortunately, major portion of interns [56%] were not aware of it.

Surprisingly, fistful of percentage of P.G. Students [56.9], were not aware about the notified national dental web sites such as IDA [India], ADA [America] and BDA [Britain], but 51.5% of the Interns claim that they were aware of those web sites.

Table-III: Denotes the knowledge of the participants about the idiot syndrome in dentistry. The participants knowledge regarding their search for medical information, 53.7% P.G. Students reported that, they don't search for such information. when it comes to Interns, exactly 50% said that search internet and other 50% revealed that they don't.

52.2% of P.G. Students revealed that after searching in the net, they never suspected a doctor's diagnosis and equal percentage [53.4%] of Interns too are under same opinion. 53.5% of the P.G. Students admitted that, their patients give respect to their advice than the online health information. More than half [51.3%] of participants from Intern designation also revealed that their patients give importance to their advice only. Regarding the patients who got online dental health information prior to visit to doctor. A high percentage of P.G. Students [52%] accepted and, patients share the information, whereas very bulk percentage of Interns [64.3%] expressed that patients don't share internet knowledge with the Interns.

When the question arises, whether the health information available in the online sites is correct- a preponderance percentage [52.7%] of P.G. Students were under impression that, it was not precise one. Even larger percentage of Interns [55.6%] also agreed with the P.G. Students. When it comes to educating the patients by explaining the treatment procedures by showing videos or charts etc, a predominant percentage [59.5%] of P.G. Students were explaining the treatment and protocols to each and every patient, unfortunately very dominant percentage [68.9%], admitted that they were not.

Finally, for the question, whether the Idiot Syndrome shall have ill effects on the future of dentistry, half of the P.G. Students were positive and remaining half were having negative opinion. Whereas very little percentage [33.3%] of Interns were under impression that in the future it will have ill effects on the dentistry, but remaining Interns under great impression that, Idiot Syndrome will not have any negative effect.

TABLE-1: Designation & Gender Distribution of the participants

			GENDER		Total
			MALE	FEMALE	
DESIGNATION	POST GRADUATE STUDENTS	Count	38	94	132
		% within DESIGNATION	28.8%	71.2%	100.0%
	INTERNS	Count	24	124	148
		% within DESIGNATION	16.2%	83.8%	100.0%
Total		Count	62	218	280
		% within DESIGNATION	22.1%	77.9%	100.0%

Figure-1 Represents the Gender wise distribution of the participants

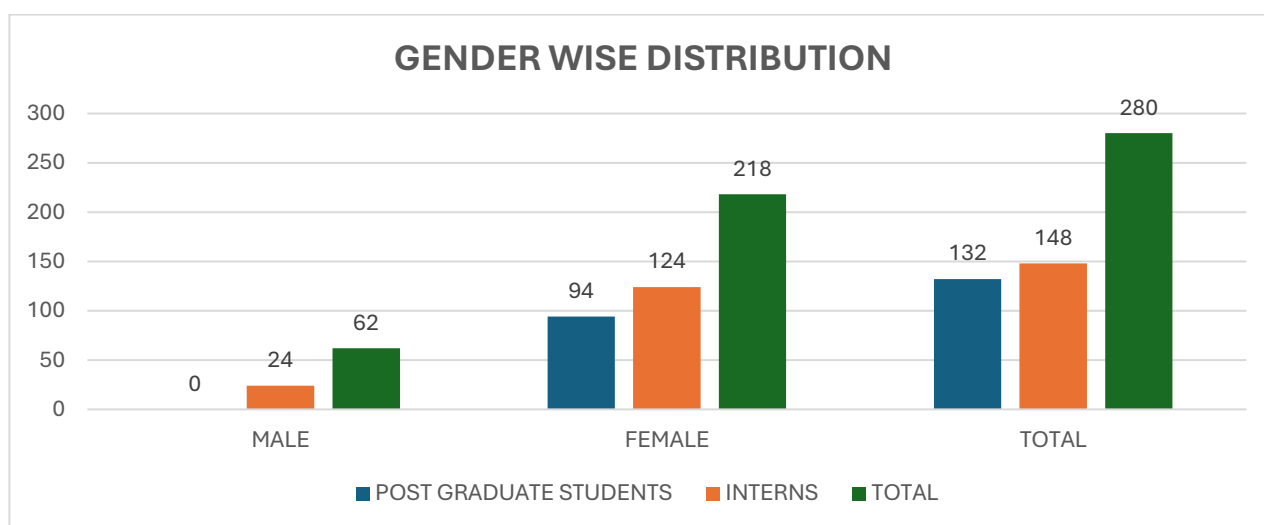
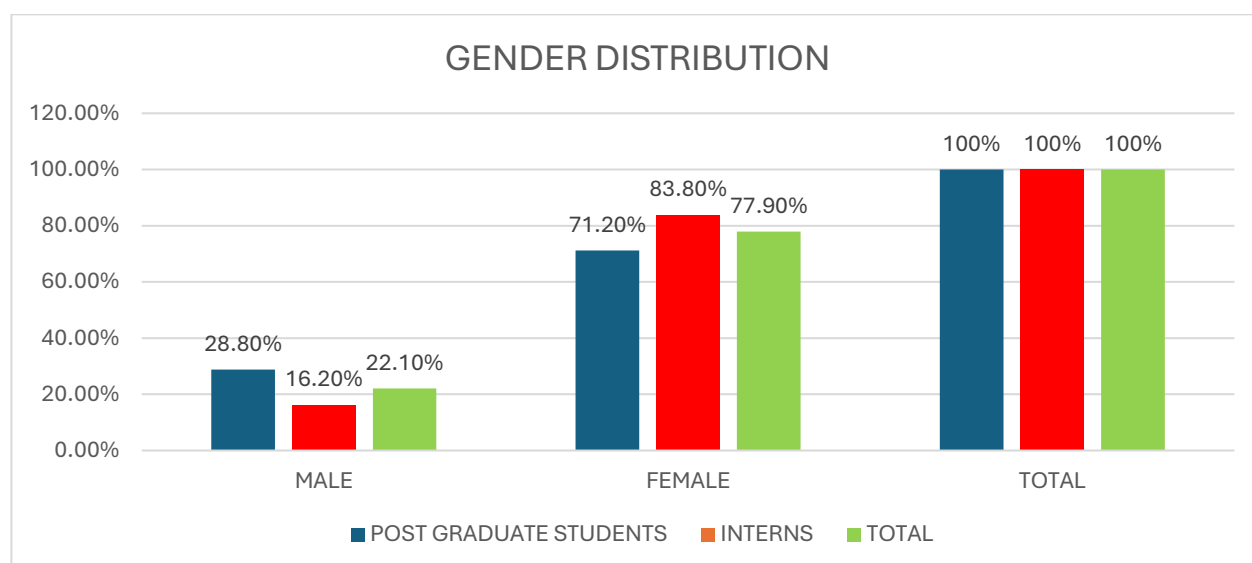


Figure-2: Gender wise distribution of the participants

**TABLE-II: Reveals the Frequency of subjects according to their Awareness on Idiot Syndrome**

SNO	QUESTIONS	DESIGNATION			
		POST GRADUATES		INTERNS	
		YES	NO	YES	NO
1	Are you aware of the term 'idiot syndrome'?	58(54.7%)	48(45.3%)	74(42.5%)	100(57.5%)
2	Are you aware of the term 'cyberchondria'?	32(41%)	46(59%)	100(49.5%)	102(50.5%)
3	Are you aware of 'excessive time spent online for medical information is the symptom of 'idiot syndrome'?	58(54.7%)	48(45.3%)	74(42.5%)	100(57.5%)
4	Are you aware of 'undesired and compulsive internet search for medical knowledge' is one of the idiot syndrome symptoms?	58(51.8%)	54(48.2%)	74(44%)	94(56%)
5	Are you aware that the notified dental websites such as IDA,ADA,BDA provide full information ?	62(43.1%)	82(56.9%)	70(51.5%)	66(48.5%)

TABLE-III: Reveals the Frequency of subjects according to their Knowledge on Idiot Syndrome

6	Do you search the internet for health information and self-medication?	100(46.3%)	116(53.7%)	32(50%)	32(50%)
7	Have you ever suspected a doctor's diagnosis after searching about it on the internet?	64(47.8%)	70(52.2%)	68(46.6%)	78(53.4%)
8	Does your patient give importance to doctor's advice than internet information?	94(46.5%)	108(53.5%)	38(48.7%)	40(51.3%)
9	Does your patients share their internet dental information with you?	102(52%)	94(48%)	30(35.7%)	54(64.3%)

10	Are you aware that all the online health information provided by the sites is not accurate?	124(47.3%)	139(52.7%)	8(44.4%)	10(55.6%)
11	Do you explain to every patient the treatment procedure with the help of videos or charts ,etc.	94(59.5%)	64(40.5%)	38(31.1%)	84(68.9%)
12	Do you think idiot syndrome will affect the dental profession in the future?	116(50%)	116(50%)	16(33.3%)	32(66.7%)

DISCUSSION

It is the duty of all the dental clinicians to act against the erroneous dental health treatment information available online, to safeguard their patients to become prey for Idiot Syndrome. By practicing meticulous tactics, the dental clinicians can win the confidence of their patients and encouraging digital literacy among patients, all categories of dental fraternity should provide the reliable dental websites, such as American Dental Association (ADA), British Dental Association (BDA) and Indian Dental Association (IDA) etc, to get first hand authenticated evidence-based dental health information. The dentists should make available SOPs regarding the treatments or digital education charts/ films etc to clear the doubts of patients, who developed by seeing the false information online. Unfortunately, in the present study, both the categories of participants were not having proper knowledge about these web sites, whereas hand full of participants know that, whatever dental health information available in the internet is not completely correct.

The misconception that developed in the patients who visit the dentists with bunch of online false dental information, should be addressed properly by listening to patients and clearing their doubts. Dentists can justify their dental advices by explaining every patient the treatment procedure with the help of videos or charts etc, and also by providing proof of evidence-based treatments that they are rendering to their patients, to build up trust among the patients against untrusty internet information. In the present survey research, a lion head share of P.G. Students (59.5%) were explaining to their patients using above methods, whereas the Interns percentage was minuscule (31.1%).

Shailaja B et al., [10] from their research study, the results revealed that, the P.G. Student was having better knowledge and awareness about cyberchondria compare to the under graduate students who participated in their study. Present study results were against the above study, the interns claimed to have better knowledge than P.G. Students. The present study results were on par with the study results of Halawani SM et al. [11]

All categories of dental personnel should have knowledge about the various social media and they should always have an eye on the unethical dental treatments and information available in various websites and try to correct them with evidence-based information and clear the misconception of patients who are trying to follow do-it your self-treatments.

According to Mohan KR et al., [12] the dental clinicians need to update their knowledge regularly and provide evidenced based dental information in their blogs/web sites and provide access to their patients. In the present study, it is clearly evident that both Interns and P.G. Students were aware of the Idiot Syndrome, whereas they are lacking knowledge about the same.

CONCLUSION

No doubt, useful health information is available on the internet, whereas it is very important to use the information wisely to avoid becoming the victims of Idiot syndrome. Over dependency on health information available online, may land in variety of risks, which may include improper diagnosis of a problem, unnecessary worry and unsuccessful treatment procedures. It is always advisable to search from reliable sources and discussing with specialists, to obtain appropriate health tips/suggestions. Ultimately, IDIOT Syndrome serves as a reminder of the importance of critical thinking, professional guidance, and responsible information consumption in the evolving landscape of healthcare. By embracing these principles, the dental profession can effectively navigate the challenges of misinformation and deliver optimal care to patients in an increasingly digital world.

REFERENCES

1. Patel J, Chakraborty Samant A, Pise R R, Jha H. Digital Healthcare and Internet Derived Information Obstruction Treatment (IDIOT) Syndrome: Understanding the Link Between Clicks and Consequences. Cureus 2024; 16(6): e63438. DOI 10.7759/cureus.63438.

2. What is IDIOT Syndrome? Here's How Internet Searchers ... Available from: <https://www.onlymyhealth.com> › ... › Miscellaneous. Last accessed on 27th Sep 2024.
3. Dr. Ushma K Kakkad . How Does the IDIOT Syndrome Affect Oral Health Badly?. Available from: <https://www.summirow.com> › Home › Dental Awareness. Last accessed on 27th Sep 2024.
4. Mathes BM , Norr AM, Allan NP, Albanese BJ, Schmidt NB. Cyberchondria: Overlap with health anxiety and unique relations with impairment, quality of life, and service utilization. *Psychiatry Res* 2018;261:204-211. doi: 10.1016/j.psychres.2018.01.002
5. Starcevic V, Berle D, Arnáez S. Recent Insights Into Cyberchondria. *Curr Psychiatry Rep* 2020;22:56.10.1007/s11920-020-01179-8.
6. Santhosh N, Ravichandran K, Niharika TP, Gajanan S, Jain J, Ramesh N . Knowledge attitude and behaviour regarding cyberchondria among dental students. *Int J Appl Dent Sci* 2023; 9(3): 255-262.
7. Vega E, Pérez Zepeda M, Lome Gutierrez. Internet health information on patient's decision-making: implications, opportunities and challenges. *Med Res Arch* 2023, 11:10.18103/mra.v11i7.2.4066.
8. World Health Organisation (WHO).Health Topics. Available from: <https://www.who.int>. Last accessed on 10th Oct 2024.
9. Linda Murray YJ. Perinatal mental health and women's lived experience of the COVID-19 pandemic: A scoping review of the qualitative literature 2020-2021. *Midwifery* 2023;123:103706.
10. Shailaja B, Shetty V, Chaudhury S, Thyloth M. Exploring cyberchondria and its associations in dental students amid COVID-19 infodemic. *Ind Psychiatry J* 2020;29(2):257-267. PMID: 34158710; PMCID: PMC8188915.
11. Halawani SM, Swapna LA, Al-Harbi SA, Hamdi BN, Masaad F, Koppolu P. Self-diagnosis & pain management in dental students in Riyadh, KSA. *Pan Afr Med J* 2019;16:34:198. doi: 10.11604/pamj.2019.34.198.18347.
12. Mohan KR, Fenn SM, Thangavelu RP. Internet Derived Information Obstruction Treatment (IDIOT) Syndrome: A Breviloquent Review. *Cureus* 2022; 14(8): e27945. DOI 10.7759/cureus.27945.

Conflict of Interest: NIL

Acknowledgements: We acknowledge Dr. Anvesh Gandham, Associate Professor, Dept of Public Health Dentistry, Lenora Institute of Dental Sciences, Rajahmundry, Andhra Pradesh, for statistical help.

Annexure-I

QUESTIONNAIRE

I. DEMOGRAPHIC DETAILS

Name (Optional).....

Gender- Male Female
Designation- Interns Post Graduate Students

II. AWARENESS ON 'IDIOT SYNDROME'

1. Are you aware of the term 'idiot syndrome'? - Yes No
2. Are you aware of the term 'cyberchondria'? Yes No
3. Are you aware of 'excessive time spent online for medical information is the symptom of 'idiot syndrome'?
Yes No
4. Are you aware of 'undesired and compulsive internet search for medical knowledge' is one of the idiot syndrome symptoms? Yes No
5. Are you aware that the notified dental websites such as IDA,ADA,BDA provide full information ?
Yes No

III. KNOWLEDGE ON 'IDIOT SYNDROME'

6. Do you search the internet for health information and self-medication?
Yes No
7. Have you ever suspected a doctor's diagnosis after searching about it on the internet?

Yes No

8. Does your patient give importance to doctor's advice than internet information?

Yes No

9. Does your patients share their internet dental information with you?

Yes No

10. Are you aware that all the online health information provided by the sites is not accurate?

Yes No

11. Do you explain to every patient the treatment procedure with the help of videos or charts, etc.

Yes No

12. Do you think idiot syndrome will affect the dental profession in the future?

Yes No