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Awareness among undergraduates about State Dental Council and Medico - legal issues - Stratified cluster random sampling survey

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ABSTRACT

Objectives: To assess the level of awareness on State Dental Council and Medico - Legal issues among Undergraduate students.

Materials and Methods: This survey was performed by online distribution of questionnaires in few Dental colleges for final years and internship students In Andhra Pradesh state. The questionnaire consisted of random questions based on Functional, structural aspects of State Dental Council and some prevention-based questions on Medico-Legal issues. The answers were either multiple choice or closed end (yes/no) and were designated with one point for every right answer chooses.

Results: A total of 625 respondents completed the questionnaire out of which 350 being intern students and 275 being final year students. Overall, awareness was medium when compared based on level of awareness, year of study and gender variation.

Conclusion: The level of awareness is medium among the respondents. However, the knowledge is comparatively high among intern students than final years students. Based on gender, slight variation is observed; females had more awareness compared to males.

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1. Introduction

The Dentists Act, 1948 established the Dental Council of India to oversee dental education and the industry across the country. The Ministry of Health and Family Welfare and regional state dental councils provide funding for it. Dentistry is no exception to the rule that law has an impact on all aspects of human activity. The main statutes pertaining to health, including the Drug and Cosmetics Act, the Dentists Act, etc., serve as a bridge between law and dentistry. Since the early professors of the profession were motivated by altruism, the ethical standards of the dentistry profession are steadily declining due to a market-driven system.

Despite the development of forensic odontology, which mandates that every dentist maintain some sort of record for every patient they treat, corporate dentistry today has degenerated into a typical commercial practice whose concerns are tightly dictated by profit and loss concerns.³ There is a very low percentage of dentists that preserve dental records, according to an assessment of dentists' awareness of the topic. The intellectual basis of health laws is still being applied and improved. This evaluation is predicated on the idea that patients and dental professionals lack information about medico-legal issues, which in turn prevents the development and delivery of dental services in an efficient manner.⁴

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Table 1: Denotes multiple choice questionnaire and allocated points

Question number	Multiple choice questionnaire	Points allocated
1.	The Dentist Act was given in the year	01
	a) 1948	
	b) 1958	
	c) 1954	
	d) don't know	
2.	True among the features included in State Dental Council of India	04
	a) Legitimate registration	
	b) Continued Dental Education (CDE) Programmes	
	c) Anti-ragging	
	d) Tobacco cessation centres in dental colleges	
	e) All of the above	
	f) Don't know	
3.	CPA/COPRA stands for	01
	a) Consumer professional act	
	b) Consumer protection act	
	c) Co-operative professional act	
	d) Combined professional act	
	e) Don't know	
4.	Orld medical association provides services like	05
	a) Health related human rights	
	b) Medical education -helping physicians to improve skills	
	c) Patient safety and public health polices	
	d) Democracy among medical associations	
	e) Don't know	
	f) All of the above	
5.	Indemnity insurance is helpful in	04
	a) Medical malpractice allegations	
	b) Breach of confidentiality allegations	
	c) Loss of third-party documents	
	d) All of the above	
	e) Don't know	
6.	Malpractice in Dentistry involves	01
	a) Delayed treatment of disease	
	b) Misdiagnosis	
	c) Intentional misconduct by Dental professional	
	d) All of the above	
	e) Don't know	
7.	Medical jurisprudence related to	01
	a) Only Forensic Medicine legal issues	
	b) Both Dental and Medical legal issues	
	c) Only Dental legal issues	
	d) Only Medical legal issues	
	e) Don't know	
8.	When it is not considered as negligence	01
	a) Inability to obtain consent form in an emergency	
	b) Doctor that didn't maintain a standard care	
	c) Injury due to lack of care	
	d) When patient is mentally conscious but mis-proxy consent is taken	
	e) Don't know	

Table 1 con	True about CPA/COPRA	01
'.	a) State commission-compensation up to Rs.20/-lakhs	U1
	b) District forum-compensation above Rs.25/-lakhs but less than Rs.1/-crore	
	 c) National commission-compensation above Rs.1/-crore d) All the above 	
	,	
).	e) Don't know f) Other State Dental Council of India register for	01
0.	a) M.D.S & B.D.S	U1
	b) Dental hygienists	
	c) Dental mechanics/technicians	
	d) All of the above	
	e) Don't know	
1.	The dentist act was given by	01
1.	a) Indian Council of Medical Research	O1
	b) Indian Dental Association	
	c) Dental Council of India	
	d) Don't know	
2.	Consent is invalid when	01
۷.	a) Given under 12 years of age	O1
	b) Given under 15 years of age	
	c) Given under 18 years of age	
	d) Don't know e) Other	
3.	Most over-prescribed drug in dentistry	01
J.	a) Amoxicillin	O1
	b) Cephalosporins	
	c) Tetracyclines	
	d) Sulphonamides	
	e) Don't know f) Other	
4.	One of the following is not the principle of ethics	01
т.	a) Truthfulness	O1
	b) Punctuality	
	c) Confidentiality	
	d) Beneficence	
	e) Autonomy	
	f) Don't know	
5.	Every Dental Surgeon should maintain his/her patient records for a	01
J.	minimum of	O1
	a) 3 years	
	b) 5 years	
	c) 2 years	
	d) Don't know	

2. Materials and Methods

2.1. Study design

The current observational study was an online-based questionnaire which was available online for one week between 23/11/2022 and 30/11/2022 which is based on Bikash Ranjan et al., 2015.⁵ The Google platform was used to construct the questionnaire and the valid link was distributed through social media (Table 1). All participants completed the questionnaire anonymously.

2.2. Study population

A total of 625 students of random dental colleges from Andhra Pradesh state had responded. The included criterion was students who are pursuing internship and final year are selected to complete the questionnaire. Remaining undergraduates are not included in this survey.

2.3. Components and scoring of questionnaires

Questions for the current survey were adapted and modified from previously validated and predicted questionnaires. A total of 25 points questionnaire was prepared and based on the number of points attained by the students, they are categorized based on level of awareness as mentioned in Table 2.

Table 2: Components and scoring of questionnaires

S. No:	Response	Range
1.	Low	0-12
2.	Medium	13-19
3.	High	20-25

Stratified cluster random sampling survey was done to study the data and refine it with possible variables. ^{6,7} These included level of awareness (low, medium and high), year of study (final year, internship) and gender variation (male, female).

3. Results

This online questionnaire was made with the help of Google forms and shared to via whatsapp groups to various dental colleges in Andhra Pradesh state to only final years and intern's students. The total number of respondents for this questionnaire was 625. Based on the overall survey points, the level of awareness among these individuals were categorized as follows:

- 1. Low (35%)
- 2. Medium (40%)
- 3. High (25%)

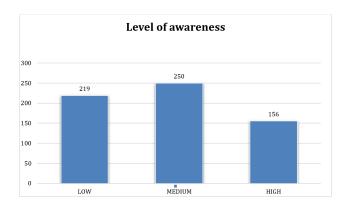


Figure 1: Categorization of level of awareness

3.1. Level of awareness based on year of study

The specific number of respondents from specific year of study are as follows:

Final year students – 275

- 1. Low 30%
- 2. Medium 55%
- 3. High 15%

Internship students - 350

- 1. Low 40%
- 2. Medium 35%
- 3. High 25%

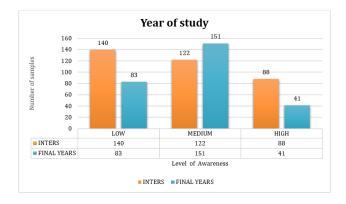


Figure 2: Level of awareness based on year of study

3.2. Level of awareness based on gender

Out of all the respondents, male respondents are 175 and female respondents are 450; thereby their level of awareness was as mentioned in Table 3.

3.3. Results of individual questionnaire

Comparing the level of awareness among final year students and intern's, the individual questionnaire scores were mentioned in Table 4.

Table 3: Level of awareness based on gender

Gender	L	ow	Med	lium	Н	ligh
	N	%	N	%		N
Male (175)	61	35%	35	20%	79	45%
Female (450)	90	20%	203	45%	157	35%
Total (625)	151	24%	238	38%	236	38%

Table 4: Level of awareness for individual questionnaire

S. No:	Question	Final year's (275)	Intern's (350)
1.	The Dentist Act was given in the year	21	26
2.	True among the features included in State Dental Council of India	18	24
3.	CPA/COPRA stands for	16	23
4.	Orld medical association provides services like	17	22
5.	Indemnity insurance is helpful in	19	24
6.	Malpractice in Dentistry involves	17	24
7.	Medical jurisprudence related to	18	22
8.	When it is not considered as negligence	21	23
9.	True about CPA/COPRA	17	21
10.	State Dental Council of India register for	19	23
11.	The dentist act was given by	20	22
12.	Consent is invalid when	18	24
13.	Most over-prescribed drug in dentistry	20	25
14.	One of the following is not the principle of ethics	17	23
15.	Every Dental Surgeon should maintain his/her patient records for a minimum of	17	24

^{*}L- Low, *M- Medium, *H- High

4. Discussion

This online survey indicated a medium level of awareness among the undergraduates regarding State Dental Council and Medico-Legal issues. The range of variables such as number of respondents, level of awareness, year of study and gender variation influenced the outcomes of this study. Selection of final years and internship students from undergraduates was based on their clinical involvement and knowledge about public health dentistry.

There were certain limitations to this survey: majorly, the difficulty in distributing the questionnaire to other colleges among the state and finding similar previous studies. As an alternative, studies in specific year of study (final years, interns) with basic knowledge on public health dentistry with clinical exposure were selected for comparisons. ^{9,10} Nevertheless, this work revealed strong points that were represented by a large sample size with no missing data.

Since the knowledge on State Dental Council and Medico-legal issues, its functional & structural features and the way of prevention, which has abundance importance for any dental professional to overcome legal situations in their clinical practice and to self protect themselves from ill-legal defamation and false allegations on them. ^{11–13} Also, the basic principles of Ethics are to be known to every outgoing doctors be it medical or dental, professional ethics are to be followed every now and then to maintain the harmony and

welfare of the doctors. 14,15

Although a high number of responses was received for this online questionnaire, participation from other years of study $(1^{st}, 2^{nd}, 3^{rd})$ was limited and responses from final years and internship students are only appreciated. Therefore, caution should be exercised before the generalization and interpretation of the results.

5. Conclusion

The responses of the participants generally indicated their medium level of knowledge to the questions asked in the questionnaire.

- 1. According to the answers, internship students are observed to have slightly more knowledge compared to final year undergraduates.
- 2. It is observed that females had more than the males which might be due to less population of males compared to females among the students.

6. Source of Funding

None.

7. Conflict of Interest

None.

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