

Original Article

Dental and Medical College Professionals Compatibility to Face Medico-legal Practice: An Awareness Cross-sectional Study at Kanpur, Uttar Pradesh

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ABSTRACT

Context: Medicine is a noble profession, but the practice of medicine has been influenced by the transition in the relationship between doctor and patient and the advertising of the modern healthcare professional. The basic principles of medicine insist that doctors should be aware of the numerous medico-legal concerns that aid in documenting patient management information properly.

Aims: The aim is to evaluate the knowledge and awareness on medico-legal Issues among Medical and Dental College Health Professionals of Kanpur, Uttar Pradesh.

Settings and Design: A cross-sectional survey was conducted among health professionals.

Subjects and Methods: A total of 316 health professionals (161 medical and 155 dental) participated in the study. A structured, closed-ended, self-administered questionnaire was used for the collection of data.

Statistical Analysis Used: Chi-square test was used to compare the awareness of medico-legal issues between medical and dental health professionals

Results: Among the 316 health professionals, 90.9% of medical and 99.3% of dental professionals were aware about the informed consent, 18.6% of medical and 10.3% of dental professionals had awareness about the Consumer Protection Act and only 18.6% of medical and 9.6% of dental professionals had attended any CDE/CME program regarding Medico-legal issues.

Conclusions: The results revealed that there was little knowledge of medico-legal concerns among the participants. There is therefore an immediate need to update the understanding of these issues to be legally more secure.

KEY WORDS: COPRA/Consumer Protection Act, ethical issues, informed consent, medico-legal

INTRODUCTION

The aim of the current study is to evaluate the knowledge and awareness on medico-legal Issues among Medical and Dental College Health Professionals of Kanpur, Uttar Pradesh. The medical profession is known worldwide as the most honorable profession. Its sole purpose is to improve the standard of life and to relieve disease and suffering. It is not a mathematical operation, but a service-oriented profession of freethinking with a code of ethics that is self-regulating.^[1] The doctor-patient alliance is focused on faith and trust. Today, in all spheres of life, we observe a rapid pace of commercialization and globalization and the medical/dental profession is no exception to this reality.^[2,3] Doctors need to be aware of the legal aspects connected with or related to their occupation and take the appropriate precautions to protect themselves and their patients from legal pitfalls. In the practice of medicine, the experience of medico-legal problems is as fundamental as clinical skills.^[4]

With the growth of the Internet and other media today, patients are very conscious of their condition and the care to be taken. It is not an easy process to practice medicine in the present period. A doctor is solely responsible for and every action he takes to provide his patients with care and treatment.^[5] Therefore, if anything goes wrong in medical treatment, a doctor must be mindful of the repercussions he or she will have to face. When involved in a medico-legal issue, a physician must know about the precautions to be taken. Medico-legal cases (MLC) are an integral part of medical practice that health professionals frequently encounter. There is an increase in the presence of MLCs, both in the Civil and Armed Forces. To prevent legal problems, careful handling and documentation of these cases is very essential.^[6] Through

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taking measures to keep patients informed, adhering to protocols and procedures, improving patient center care, and understanding how to protect against malpractice decisions, lawsuits for medico-legal problems may be reduced or prevented.^{17,81} This study focuses on medico-legal issues and aspects in daily clinical practice by assessing the awareness of medico-legal issues among medical and dental health professionals at Kanpur.

SUBJECTS AND METHODS

A cross-sectional questionnaire survey was carried out to assess the knowledge of health professionals working in medical and dental colleges of Private University Kanpur on medico-legal issues. Ethical clearance was obtained from Institutional Review Board. The pilot study was conducted among health professionals working in private clinics to check the feasibility of the study and to pretest the questionnaire for validity and reliability. From the results obtained from the pilot study keeping the power of 90% and alpha error at 5% sample size was estimated to be 252. One Medical College and one Dental College were included in the study. All the health professionals were invited to participate. Only 316 health professionals (161 medical and 155 dental) agreed to participate in the study.

DATA COLLECTION

The study was conducted in February 2020. A specially designed closed-ended questionnaire which consisted of 20 questions was to assess the awareness of health professionals participants. The health professionals were approached individually and the purpose of the study was explained to them and informed consent was obtained. The questionnaire was distributed to them and the entire questionnaires were explained to avoid any ambiguity. They were assured of the confidentiality of their responses and were requested to give appropriate answers. The filled Questionnaire was collected on the same day.

STATISTICAL ANALYSIS

The data were collected, compiled, arranged systematically, and analyzed using SPSS Version 17.0 (SPSS Inc., Chicago, IL, USA). Mean (standard deviation) values were analyzed. Percentages were calculated for the responses gave by the Medical and Dental College Health Professionals separately. The Chi-square test was applied to compare the awareness of the participants and *P* value calculated.

RESULTS

Out of 316 participants, 161 (50.9%) were Medical College health professionals and 155 (49.0%) were Dental College health professionals. From the male participants, 91 were from the dental group and 89 from the medical group. The corresponding number for the female participants was 64 and 72, respectively. From the sample of 316 participants total of 220 had < 10 years of experience in private practice while 96 of the total participants had more than 10 years of experience in private practice. The distribution of the study participants according to their demographic variables is shown in Table 1.

I. Knowledge and practices of medical and dental health professionals regarding informed consent [Table 2].

Table 1: Demographic distribution of the participants (n=316)

Variables	Dental (n=155)	Medical (n=161)	Total
Designation			
Tutor	11	14	25
Post graduate student	70	78	148
Senior lecturer	21	19	40
Reader	25	24	49
Professor	28	26	54
Gender			
Male	91	89	180
Female	64	72	136
Experience (years)			
<10	111	109	220
>10	44	52	96

Study results reveal that 100% of both dental and medical college health professionals said that they would inform to the patient about all the treatment options available; 71.6% of dental college health professionals and 81.9% of medical college health professionals said that they would explain about the treatment procedure and complications associated with anesthesia; 70.3% of dental college health professionals and 81.3% of medical college health professionals stated that before starting any treatment they would give the success and failure rate of the treatment; 70.3% of dental college health professionals and 81.3% of medical college health professionals agreed that before taking radiograph they would explain about the harmful effects of excessive exposure to radiation. About 90.9% of dental college health professionals and 99.3% of medical college health professionals accepted that they would take informed consent from patients; 81.9% dental college health professionals and 71.4% of medical college health professionals accepted the necessary of consent form for every treatment; 100% of both dental college health professionals and medical college health professionals said that children should never be treated without consent of parents; 67% of dental college health professionals and 24.8% of medical college health professionals said that the consent form is obtained only for operations, not for tests and medications which are highly statistically significant.

About 69% of dental college health professionals and 82.6% of medical college health professionals were aware that a copy of the informed consent form should be given to the patient; 16.1% of dental college health professionals and 14.2% of medical college health professionals said that the purpose of the consent form is to protect the doctor, whereas 26.4% of dental college health professionals and 14% of medical college health professionals said that to protect the patient and 57.4% of dental college health professionals and 70.8% of medical college health professionals agreed that consent form is to protect both the doctor and patient.

II. Awareness on the Consumer Protection Act (COPRA/CPA) among dental and medical college health professionals and precautions to be taken.

Results revealed that 89,6% of dental college health professionals and 81.3% of medical college health

Table 2: Knowledge and practices of medical and dental health professionals regarding informed consent

Questions	Dental, n (%)	Medical, n (%)	P
1. Before starting any treatment do you inform the patient about all the treatment options available?			
a. Yes	4(1.2%)	5 (1.58%)	0.001*
b. No	151(47.7%)	156 (49.3%)	
2. Do you give a detailed explanation of the procedure and explain the complications associated with anesthesia?			
a. Yes	111 (71.6)	132 (81.9)	0.028
b. No	44 (28.3)	29 (18)	
3. Do you give the success and failure rate of a treatment before starting?			
a. Yes	109 (70.3)	131 (81.3)	0.027
b. No	45 (29)	30 (18.6)	
4. Before taking a radiograph, do you tell the patient about the harmful effects of excessive exposure to radiation?			
a. Yes	109 (70.3)	131 (81.3)	0.021
b. No	46 (29.6)	30 (18.6)	
5. Do you take informed consent from your patients?			
a. Yes	141 (90.9)	160 (99.3)	0.000
b. No	14 (9)	1 (0.62)	
6. Do you believe that a consent form is necessary for every treatment provided at your clinic?			
a. Yes	127 (81.9)	115 (71.4)	0.027
b. No	28 (18)	46 (28.5)	
7. Children should never be treated without consent of parent?			
a. Yes	149(41.2%)	154 (48.7%)	0.001*
b. No	6(1.8%)	7 (2.21%)	
8. Consent only for operations - not for tests and medications?			
a. Yes	104 (67)	40 (24.8)	0.000
b. No	51 (32.9)	121 (75.1)	
9. Are you aware that a copy of the informed consent form should be given to the patient if asked for?			
a. Yes	107 (69)	133 (82.6)	0.004
b. No	48 (30)	28 (17.3)	
10. The purpose of the consent form is?			
a. To protect the doctor	25 (16.1)	23 (14.2)	0.015
b. To protect the patient	41 (26.4)	24 (14)	
c. Both	89 (57.4)	114 (70.8)	

*Constant, $P \leq 0.05$ statistically significant

professionals consented that they did not know about COPRA/CPA; 100% of both dental and medical college health professionals were not aware about the COPRA/CPA office, the person to contact about COPRA/CPA and the legal procedures to tackle COPRA/CPA; 83.8% of dental college health professionals and 73.2% of medical college health professionals said that they could practice during the time when they are under the court of law, i.e. booked under COPRA/CPA [Table 3].

III. Awareness of dental and medical college health professionals on professional compensation and medico-legal programs/courses.

About 87% of dental college health professionals and 74.5% of medical college health professionals agreed that they did not know about professional compensation claims. Only 14.1% of dental college health professionals and 24.2% of medical college health professionals had insurance coverage to protect themselves from professional compensation claims. Only

12.2% of dental college health professionals and 21.7% of medical college health professionals said that they had studied about medico-legal issues in their curriculum. Only 9.6% of dental college health professionals and 18.6% of medical college health professionals had attended CDE/CME program regarding medico-legal issues; 100% of both dental college health professionals and medical college health professionals agreed that they were not aware about any of the course regarding medico-legal issues in India [Table 4].

DISCUSSION

The result of this study gives important insight into the understanding of medico-legal problems and the need to develop their medico-legal skills, attitudes, and practices. The majority of medical and dental college health professionals were mindful of informed consent in the present study; which is similar to a study conducted by Kotrashetti *et al.* in Belgaum where 81.9% were aware of informed consent.^[9] It is also found similar to a study conducted by Senthilkumar *et al.*

Table 3: Awareness on consumer protection act/consumer protection act among dental and medical college health professional and precautions to be taken

Questions	Dental, n (%)	Medical, n (%)	P
1. Do you know what COPRA is?			
a. Yes	16 (10.3)	30 (18.6)	0.036
b. No	139 (89.6)	131 (81.3)	
2. Do you know where the COPRA office situated in Kanpur?			
a. Yes	14(4.43%)	143(45.2%)	0.001*
b. No	141(44.6%)	18 (5.69%)	
3. Do you know whom to contact in case you are booked under COPRA?			
a. Yes	4(1.26%)	5 (1.58%)	0.001*
b. No	151(47.7%)	156 (49.3%)	
4. Do you know the legal procedures to tackle COPRA?			
a. Yes	4(1.2%)	5 (1.58%)	0.001*
b. No	151(47.7%)	156 (49.3%)	
5. Can you practice during the time when you are under the court of law, i.e., booked under COPRA?			
a. Yes	130 (83.8)	118 (73.2)	0.028
b. No	25 (16.1)	42 (26)	

*Constant, $P \leq 0.05$ statistically significant. COPRA: Consumer protection act

Table 4: Awareness of dental and medical college health professionals on medico-legal programs/courses

Questions	Dental, n (%)	Medical, n (%)	P
1. Do you know what professional compensation claims is?			
a. Yes	20 (12.9)	41 (25.4)	0.004
b. No	135 (87)	120 (74.5)	
2. Have you taken any insurance coverage to protect yourself against claims?			
a. Yes	22 (14.1)	39 (24.2)	0.023
b. No	133 (85.8)	122 (75.7)	
3. Have you studied about medico-legal issues in your dental/medical curriculum?			
a. Yes	19 (12.2)	35 (21.7)	0.251
b. No	136 (87.7)	126 (78.2)	
4. Have you attended any CDE/CME program regarding medico-legal issues ever?			
a. Yes	15 (9.6)	30 (18.6)	0.022
b. No	140 (90.3)	131 (81.3)	
5. Do you know any course regarding medico-legal issues in India?			
a. Yes	0	0	*
b. No	155	161	

*Constant, $P \leq 0.05$ statistically significant. CDE: Center for distance education, CME: Continuing medical education

and Osime *et al.* in Benin where 74.6% of health professionals had awareness about informed consent.^[10,11]

In the study conducted by Milind *et al.* in Vadodara where 67.7% of medical college health professionals and 65.7% of dental college health professionals were not aware of CPA, which is found in accordance with the present study results where mostly medical and dental college health professionals were not aware of CPA.^[12] In the present study, almost all of medical college health professionals and dental college health professionals were not aware of medico-legal programs/courses which is comparatively low to a study conducted by Scot P. Saltstone in Ontario in which 48.9% were aware about course regarding medical law and 71.1% had received some medical-legal education.^[13] This study found that dental college health professionals had less awareness about medical ethics which is similar to the study conducted by Garbin *et al.* in Aracatuba where 48.57% of dental health professionals were

aware about ethics and bioethics.^[14] This study displayed that medical college health professionals had less awareness about medico-legal issues which is similar to the study conducted by Nash *et al.* in Australia where 97% of general practitioners agreed that they admit mistakes due to lack of knowledge about medico-legal issues.^[15] It is also similar to the study conducted by Gebremariam and Hagos in Asmara that health professionals and legal practitioners lack in knowledge and awareness about medico-legal issues.^[16] In this study, the awareness among medical college health professionals was higher when compared to dental college health professionals which is similar to the study conducted by Singh *et al.* and Milind *et al.*^[12,17]

The limitations of the study were that this study was conducted in only one medical college and dental college that have less health professionals, hence small sample size. Hence, the findings of this study cannot be generalized to all medical

and dental health professionals. Emphasizing the importance of medico-legal issues in the curriculum, further studies are suggested to be conducted among more health professionals in several medical institutions regarding medico-legal issues.

CONCLUSIONS

Awareness of informed consent among dental and medical college health professionals was highly prevalent in the present study. However, both the medical and dental college health professionals exhibited less significance in their gained skills concerning COPRA/CPA knowledge. Besides, the same lack of understanding concerning their awareness of medico-legal programs was observed among them. The findings have also shown that there is an immediate need to update the perception of medicolegal problems to be legally on the safer side for medical and dental college health professionals.

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CONFLICTS OF INTEREST

There are no conflicts of interest.

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