Knowledge Regarding Dentists (Code of Ethics) Regulation among Dental Students in Mathura: A Cross-sectional Study

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Abstract
Background: “Ethics” is inferred from word “ethos” meaning custom or character. Ethics helps to support confidentiality, self-determination, veracity, and fidelity and encourages the well-being and impartiality of individual. This study aimed to assess the knowledge of dentist code of ethics among dental students in Mathura city.

Materials and Methods: A cross-sectional questionnaire-based survey was executed among 252 dental students studying in K. D. Dental College, Mathura, to assess the knowledge of dentists code of ethics. The study population was selected using convenient sampling. All the dental students studying in final year BDS, internship, and doing postgraduation were included in this study. A structured questionnaire consisted of total 19 questions related to their knowledge of dental ethics was used to assess knowledge about dental ethics.

Results: While assessing the knowledge regarding dentist code of ethics, it was found that about 206 (81.7%) and 144 (57.1%) participants had knowledge that in the year 1948 Dentist Act was given and dentists (Code of Ethics) regulation was given by the Dental Council of India, respectively. Few participants, that is, 72 (28.6%) knew that refusing treatment of HIV positive patients was unethical for dental surgeon. However, 116 (46%) participants knew that supply or selling drugs at dental clinic were not unethical.

Conclusion: The present study concluded that participants had sparse knowledge about dentists (Code of Ethics) regulation. It is essential to incorporate ethical standards in daily dental practice. It is needed to provide appropriate training methods in the dental profession for continuing toward acceptable ethical behavior in dentistry.

Keywords: Dental ethics, Ethical behavior, Knowledge

Introduction
“Ethics” is inferred from word “ethos” meaning custom or character. Ethics is about morals judging whether actions are right or wrong.1 The term “ethics” refers to the moral code of conduct in a civil society and the rules, customs, and beliefs of that society.1 Ethics deals with how health-care practitioner applies an ethical code of conduct to patients or cases, taking into consideration self-respect, individuality, safety, and well-being of patients.1 Ethics cannot imposed by a profession or by law, but by moral obligation. Ethics holds up confidentiality, self-determination, veracity, and fidelity and promotes the well-being and impartiality. Doctor-patient relationship is rested on faithfulness, truthfulness, confidentiality, and the quality of care. Ethics is fundamentally based on “doing what’s right” and tells us how to act in a given situation. It defines ideal human character and etiquette where the judgment can be directed in favor of right duty and should maintain good interpersonal relations. Dental ethics is a moral obligation that encloses professional conduct and judgment exacted by the members of dental profession.4 In 1976, dentists (Code of Ethics) regulations came into existence and thereafter revised in the year 2014.4 It is responsibilities of every registered dentists to read these regulations and understand their liabilities and follow rules or instructions. However, dental ethics includes specific guidelines that have been come forward for information of members of the profession. In India, the
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Dental Council of India (DCI) is the authorized body evolved in maintaining ethics among dental professionals. The dental ethics describes duties and rights of a dental practitioner. The health profession is considered as a “noble profession”. The health professionals alleviate patients’ distress and on numerous instances, save lives. Ironically, the doctor-patient relationship is dynamic and complex, as it is both strong and vulnerable. It is strong because of various factors such as confidentiality, trust, and the concern they show for the patients. Dentistry has progressed from undifferentiated profession to one of the pioneering professions. The quality of this profession is obeying code of ethics. There are several direct and indirect acts related to the dental profession. Dental professionals should know their responsibilities and precautions to avoid legal problems. Therefore, this current study is carried out to evaluate the knowledge of dental code of ethics among dental professionals in Mathura so that workshop can be planned to support effectual delivery of oral health.

Materials and Methods

A cross-sectional questionnaire survey was conducted at K. D. Dental College, Mathura, among dental students to assess the knowledge of dentists code of ethics. Ethical clearance was obtained from the Institutional Ethical Committee before the start of the study. To validate the questionnaire pilot study was conducted before study. The study population was selected using convenient sampling. All the dental students studying in final year BDS, internship, and doing postgraduation were included in this study. Dental students who were not available on the day of the study were excluded from the study. A structured questionnaire consisted of total 19 questions related to knowledge of dentists code of ethics regulation was used. Name of participant was not recorded to assure impartiality.

The study population comprised final year BDS students, interns, and postgraduate students. A total of 252 participants participated in the survey. The aim of the study was explicated to study participants and verbal consent was obtained from each participant. To prevent obscurity, all the questionnaires were well described to participants by investigator and questionnaire was distributed to participants. All the participants were instructed to give suitable responses. The data were coded and entered into Microsoft Excel sheet. Descriptive statistics were calculated to check knowledge regarding dentists code of ethics among participants using SPSS version 21.

Results

Demographic details

Table 1 shows demographic details among the 252 participants, 108 (42.9%) participants were male and 144 (57.1%) participants were female. Majority of the participants, that is, 94 (37.3%) were final years, 87 (34.5%) were interns, and 71 (28.2%) were postgraduates.

Knowledge regarding dentist act and dentists (code of ethics) regulation

Table 2 shows knowledge about Dentist Act and dentists (Code of Ethics) regulation among participants. About 206 (81.7%) and 144 (57.1%) of the participants had knowledge that in the year 1948 Dentist Act was given and DCI had developed code of ethics regulation for dentist, respectively. Only 118 (46.8%) Table 2: Knowledge regarding Dentist Act and dentists (code of ethics) regulation

| Questions                                                                 | Response percentage (n %) |
|---------------------------------------------------------------------------|----------------------------|
| In which year Dentist Act was given?                                      |                            |
| 1948                                                                      | 206 (81.7)                 |
| 1956                                                                      | 18 (7.1)                   |
| 1957                                                                      | 11 (4.4)                   |
| Do not know                                                               | 17 (6.7)                   |
| The dentists (code of ethics) regulation was given by                     |                            |
| Indian Council of Medical Research                                        | 8 (3.2)                    |
| Dental Council of India                                                   | 144 (57.1)                 |
| Indian Dental Association                                                 | 96 (38.1)                  |
| Do not know                                                               | 4 (1.6)                    |
| In which year dentists (code of ethics) regulation first came into force? |                            |
| 1948                                                                      | 46 (18.3)                  |
| 1956                                                                      | 50 (19.8)                  |
| 1976                                                                      | 118 (46.8)                 |
| Don’t know                                                                | 38 (15.1)                  |
| In which year dentists (code of ethics) regulation was revised?           |                            |
| 2000                                                                      | 44 (17.5)                  |
| 2015                                                                      | 42 (16.7)                  |
| 2014                                                                      | 106 (42.1)                 |
| Do not know                                                               | 60 (23.8)                  |
| How may principles of ethics there?                                       |                            |
| 4                                                                         | 14 (5.6)                   |
| 5                                                                         | 103 (40.9)                 |
| 6                                                                         | 127 (50.4)                 |
| Do not know                                                               | 8 (3.2)                    |
participants were aware that dentists (code of ethics) regulation came into force in 1976, and about 106 (42.1%) participants had knowledge that the code was revised in 2014. About 127 (50.4%) were aware of six principles of ethics.

Knowledge regarding unethical acts according to the revised code of ethics

Table 3 shows the knowledge of participants regarding unethical principles. About 121 (48%) of the participants were aware that it was unethical to use abbreviations of memberships in associations or organizations as a suffix to their names. Only 63 (25%) participants were aware of providing free consultations and treatment to the fellow dentist and their immediate family was not mandatory. Only 72 (28.6%) participants had knowledge that refusing treatment HIV-positive patients or suffering from any other contagious disease was unethical. Few participants, that is, 96 (38.1%) knew that advertisement a dental clinic was not unethical provided that the decorum was maintained. About 100 (39.7%) participants aware that name of dentist’s in commercial products such as toothpaste and toothbrush was unethical and 82 (32.5%) participants knew that it was unethical for dentist to attach a signboard/banner in pharmacy or in places where he/she does not work. Only 116 (46%) participants had knowledge that supplying or selling drugs related to dentistry in dental clinic was not unethical and about 96 (38.1%) participants knew that receiving gifts from pharmaceutical companies were not ethical for a dental surgeon. Majority of participants, that is, 197 (78.2%) knew that every dental surgeon should preserve records of patients for a minimum of 3 years from date of commencement of treatment and 155 (61.5%) participants knew that there is no bar on display of fees and other charges in dental clinic. Few participants, that is, 70 (27.8%) knew that it is unethical to print self-photograph on letter head of dentists. Majority of participants, that is, 187 (74.2%) knew that confidence concerning individual or domestic life entrusted by patient should never be revealed unless required by laws of the state.

Discussion

Ethics is a branch that deals with academic discipline and intellectual prospects of philosophy. Philosophy that derives from Greek words “philo” and “sophia” which means “love of wisdom.” Ethics makes us to deal some daily questions like: How should we live our lives? How should we behave? The privilege of being a dentist comes with a responsibility to society and to fellow affiliates of profession to carry out one’s professional activities in an exceedingly highly ethical manner. The current study made an effort to analyze dental students grip on dental code of ethics. The study, however, had minimum literature available for comparison.

In the present study, it was observed that more than half of the participants, that is, 206 (81.7%) aware of the year in which the Dentist Act was given and 144 (57.1%) participants knew

| Questions                                                                 | Response percentage (%) |
|--------------------------------------------------------------------------|-------------------------|
| Is it unethical for a dentist to use abbreviations of memberships in associations or organizations as a suffix to their names? | Yes 114 (45.2) No 121 (48) Do not know 17 (6.8) |
| Is it not mandatory to provide free consultations to fellow dentist and their immediate family? | Yes 172 (68.3) No 63 (25) Do not know 17 (6.7) |
| Is it unethical for a dental surgeon to refuse treatment of HIV-positive patients or patients suffering from any other contagious disease | Yes 176 (69.8) No 72 (28.6) Do not know 4 (1.6) |
| Is it ethical for dental surgeon to advertise a dental clinic?            | Yes 96 (38.1) No 138 (54.8) Do not know 18 (7.1) |
| Can a dentist use their name in commercial products such as toothpastes and toothbrush? | Yes 100 (39.7) No 140 (55.6) Do not know 12 (4.8) |
| Is it ethical to affix a signboard in chemist shop or in other places where the dentist does not reside or work | Yes 82 (32.5) No 151 (59.9) Do not know 19 (7.5) |
| Supplying or selling drugs related to dentistry in dental clinics is ethical or not? | Yes 96 (38.1) No 138 (54.8) Do not know 18 (7.1) |
| Is it not ethical for a dental surgeon to receive gifts from pharmaceutical companies? | Yes 96 (38.1) No 135 (53.6) Do not know 21 (8.3) |
| Every dental surgeon should preserve records of patients for a minimum of 3 years from date of commencement of treatment | Yes 197 (78.2) No 27 (10.7) |
that DCI had developed code of ethics regulation for dentist, respectively. Similar trend was seen in the study carried out by Kesavan et al. in which majority of participants had knowledge about the year in which Dentist Act was came and who had given code of ethics.\(^7\) When participants were questioned about the year in which the dentists (code of ethics) regulation came into force and when was code of ethics revised, less than half of the participants, that is, 118 (46.8%) and 106 (42.1%) had knowledge which is in contrast to study conducted by Kesavan et al. in which lesser number of participants had knowledge.\(^4\) When participants were questioned about number of ethical principles, half of the participants, that is, 127 (50.4%) knew that there were six principles of ethics. Result was found in contrast to a study conducted by Salve et al. in which lesser number of participants had knowledge for number of ethical principles.\(^2\)

Concern regarding the ethical conduct of health-care professionals among public has been increasing gradually. Nowadays, for majority stages of clinical practices, the role ethics has become a moral, legal, and basic needs.\(^3\) Supplying or selling drugs in dental clinic are not unethical for dental professionals, and in the present study, 116 (46%) participants were aware of that. However, in the study conducted by Salve et al., 76 (21.7%) participants knew about the same. In the present study, about 197 (78.2%) participants knew that every dentist should preserve records of patients for minimum of 3 years. In a study carried by Salve et al., 306 (86.9%) participants were aware of that.\(^4\) In the study carried by Kesavan et al., about 146 (42%) participants knew that advertisement of a dental clinic is not unethical. Almost similar finding as found in the present study in which 96 (38.1%) participants were aware of the same.\(^6\)

The present study revealed that almost half of the participants unaware of using abbreviations of memberships in associations or organizations as a suffix to their names were unethical. The present study showed lack of knowledge regarding dental ethics which is an important chapter in dental curriculum for undergraduate as well as postgraduate students. According to the revised regulations, it was not mandatory to provide free consultations and treatment to the fellow dentist and their immediate family. In the present study, more than half of participants were aware of that.

As dentistry is more kind of a business, the competitiveness within the profession can influence negativism. The dentist faced the problem in deciding the correct treatment modalities in a maltreated case. Majority of the dentists do not wish to disparage their fellow dentists. The first duty of the dentist is to serve the patients regardless of class, creed, etc. Justice demands that every person should be treated equally. The limitation of the present study is that it was a convenience sampling with small sample size, so results cannot be generalized to the total dental professionals of North India. Another limitation is “recall bias”, where the participants earlier encounter affect his/her memory.

**Suggestions and recommendations**

There is an urgency for continuing dental education on dentist code of ethics which could help bridge the gap at undergraduate and postgraduate level to some extent. Curriculum changes are made in both undergraduate and postgraduate syllabus giving importance to code of ethics regulation in dental practice.

**Conclusion**

The present study concluded that participants had sparse knowledge about dentists (code of ethics) regulation. Almost all the participants who participated in the study had inadequate knowledge regarding ethics. Taking into account, the lack of awareness of the ethical principles among the majority of dental practitioners, specific programs, and events or activities should be conducted to promote knowledge of ethics. It is essential to incorporate ethical standards in daily dental practice. It is needed to provide appropriate training methods in the dental profession for continuing toward acceptable ethical behavior in dentistry.

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