

KNOWLEDGE AND ATTITUDE OF STUDENTS REGARDING ETHICS AND ITS ROLE IN DENTAL STUDIES; A VIGNETTE BASED STUDY

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ABSTRACT

Professional ethics is an integral part of dental practice as it ensures that quality dental care is being provided to the patients and that a healthy working environment can be established.

The objective of this study was to assess the knowledge of ethics in students of third year and final year B.D.S exposed to the clinical setup and determine the importance of ethics in the dental curriculum.

A cross-sectional study was conducted among 3rd year and 4th year BDS students of Foundation University College of Dentistry, Islamabad from May 2019 to July 2019.

Data was collected through a questionnaire which included 8 questions highlighting the importance of four basic principles of ethics; autonomy, justice, beneficence and non-maleficence. Data was evaluated using SPSS version 17 by comparing mean score of both classes and mean of individual principles of ethics. A total of 95 students of both classes were included in the study. Sixty-six students responded and participated in the survey. The mean age and standard deviation were 21.4 ± 1.2 . Female students were 86.4% and 13.6% were males.

The mean score and S.D of 3rd year was 4.91 ± 1.44 . For final year the scores were 4.41 ± 1.65 .

Comparison of statistics for each ethical principle revealed that students had most knowledge about Non maleficence with a score of 1.65 ± 2 , Beneficence = 1.32 ± 2 , Justice = 1.03 ± 2 , and Autonomy = 0.74 ± 2 . In conclusion ethics should be included in the dental curriculum in dental colleges all over Pakistan, not only as a topic but as a separate subject which is examined and evaluated.

Key words: *knowledge, ethics, dental studies.*

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INTRODUCTION

Professional ethics is an integral part of dental practice as it ensures that quality dental care is being provided to the patients and a healthy working environment can be established, as well as assuring patients of the skill of practitioners.¹ The shift of dental education from an apprenticeship style to formal dental schools in the 19th century lead to a revolution in dental practices.² Although this remarkably improved the skills

of dentists, it led to a deterioration in their social and professional behavior, therefore it became imperative that ethics be taught in dental schools. Dental institutions around the world have incorporated ethics in their curricula to encourage personal and professional development of emerging dentists.³

Ethics is a vast subject, but for the purpose of simplicity it is said to be composed of four pillars i.e. justice, beneficence, autonomy and, non-maleficence.⁴

Dental schools in Pakistan teach ethics through short courses and workshops. There is no formal teaching and evaluating system that can properly address and assess the knowledge of students before their transition to clinical practice.

Therefore, the purpose of this study is to high-

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light the importance of including ethics in curricula by assessing the knowledge and attitude of students regarding ethics.

MATERIAL AND METHODS

This cross-sectional descriptive study was designed to assess the knowledge and attitude of students of 3rd year and 4th year B.D.S of Foundation University College of Dentistry (FUCD). First year, second year and post graduate students were excluded from the study. It was conducted by distribution of a pre validated scenario-based questionnaire from May 2019 to July 2019. The approval was obtained from Ethical Review Committee of Foundation University.

The questionnaire was pre tested with a select group of students and minor changes in wordings and format were made in view of their comments in the final questionnaire. The questionnaire comprised of 8 vignettes/scenarios, 2 for each of the four domains of ethics i.e. autonomy, justice, beneficence and non-maleficence, had a content validity index of 0.7 and test retest reliability of 0.7.

The vignettes were designed in accordance with the common ethical dilemmas faced by dental students in a clinical setting. Individual vignette was scored as 1 for the best possible option and 0 for other options, so maximum score was 8 and lowest score was 0. Each ethical domain was also assessed separately, so 2 was maximum score and 0 was lowest.

Data was collected by distributing online forms to 3rd Year and 4th year B.D.S students of FUCD with instructions to fill the form by themselves and according to their level of understanding. Data was analyzed using SPSS version 17 using descriptive statistics in the form of mean and standard deviation. T-test was applied to find out association between mean score and year of study.

RESULTS

A total of 95 students of both classes were included in the study, eighty students consented to participate and sixty-six students completely filled and returned-forms in the survey. Those students who submitted incomplete forms were excluded from the study as were first year, second year and post graduate students. The overall mean age was 21.4 ± 1.2. Female students were 86.4% while 13.6% of the students were males. Total score of knowledge of ethics was 8. The maximum score achieved was 8 while minimum score was 1.

The mean score and S.D of 3rd year was 4.91 ± 1.44 and for final year the scores were 4.41 ± 1.65 (Fig.1). The coefficient of variation of 3rd year was 29.3 and 4th year was 37.4. There was no significant association between mean score and year of study.

TABLE 1: SCORES OF INDIVIDUAL PRINCIPLES

Ethical principle	Mean	Std. Deviation
Autonomy	.74	.686
Beneficence	1.32	.683
Justice	1.03	.656
Non-Maleficence	1.65	.540

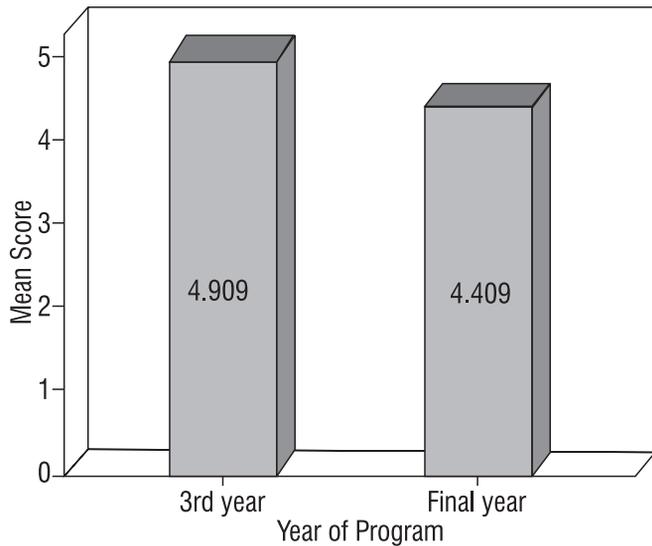


Fig 1: Mean Scores of Third Year and Fourth Year

The mean score was 4.88 for male students and 4.72 for female students. The association between mean score and gender was also insignificant.

Comparison of statistics for each ethical principle revealed that the students had most knowledge about Non maleficence with a score of 1.65±2. The scores of the other principles are given in Table 1.

A total of 39.4% students did not have knowledge of autonomy and answered both of the questions incorrectly. About 47% students got half of the questions right, and 13.6% had full knowledge of the principle.

With regards to beneficence 12.1% of the students answered both questions incorrectly, 43.9% got half right, 43.9% achieved a perfect score.

Regarding justice 19.7% got 0/2, 57.6% answered half correctly, 22.7% answered both correctly.

Non maleficence had the best questions answered, with only 3% answering incorrectly. 68.2% got a perfect score, 28.8% got half of them correct.

DISCUSSION

Professional ethics in dentistry is one of the basic components for achieving success in dental practice because it ensures patients' confidence in adroitness of the practitioners as well as in the dental procedures

to which they are subjected.¹

Autonomy is viewed as the right of self-determination of the patient. Beneficence means that a physician should act always in the best interest of the patient under all circumstances. The basic idea of Non-maleficence is not to cause any harm to the patient. Justice means to act fairly in all the matters relating to the patients and their health.⁵

Dental ethics and professionalism are often relegated to being taught on the coat-tails of other disciplines, if they are taught at all. The assumption that students develop professionalism as a by-product of other learned competencies in dentistry is well documented to be false, and yet, little has been done in many institutions to deal with this.⁶

Ethics teaching to Bachelors of dental surgery students is at the level of 2nd year primarily through conventional lectures. The mode of assessment is short answer questions added in the paper of community dentistry. But in real life clinical practice, patients are presented to them with different ethical issues and dilemmas.⁷

Keeping these ethical dilemmas in mind, the results to our study were fairly predictable. Due to lack of formal teaching of ethics, the scores were near to equal and average for both students of 3rd and final year. However, their exposure to clinical setting demand that they be well versed in ethics to ensure proper care of patients.

Dentists today are facing challenging ethical problems to an unprecedented degree.⁸ This is probably because of the focus on the theoretical aspects of ethics. Only memorization of ethical theories and codes may not be enough to solve ethical dilemmas. A curriculum renewal may help address this by introducing and integrating ethical training throughout four years of dental education.⁹

Along with the need for a subject introduction, as in medicine where Behavioral Sciences is a subject taught throughout second year of MBBS course and assessed at the end along with other subjects in the professional exams, there needs to be a proper curriculum set defined specially to cater to the needs of dental students. We are all aware that dental students do not, if rarely, face a life and death situation. Thus, teaching them about critical topics like DNR, or euthanasia is futile and wasteful of time. Creating a curriculum specific to lectures on dental ethics system aims to classify the issues in biomedical ethics and put them in an order of significance relevant for dental practice. This approach has the advantage of allowing the lecturer to arrange a specific curriculum for dental ethics, as well as avoiding an overload of theoretical information.⁸

Several studies have been carried out to assess the most practical, useful and successful method of developing an ethical state of practice from the beginning. The dominant approach uses a combination of lectures and case-based seminars to teach ethical principles and provide practice in decision-making procedures to reason through dilemmas where there are several correct ways to act.¹⁰ This will ensure less confusion in real life scenarios with making prompt decisions.

The need for ethics to be more fully integrated across the curriculum. This includes progression into the clinical years; the need to assess and ensure competence; the need for faculty development; and the need for more attention to method of instruction.³ This has been highlighted across all dental schools throughout the world. However, it is given that, these courses will not succeed unless they are taken seriously by the dental school community and actively supported by the faculty.¹¹

A similar study was conducted in Saudi Arabia by Sahar et al on the significance of professional ethics among undergraduates and fresh graduates. They found out that professional ethics was the essence to practice dentistry in order to earn good name and position in society. It was suggested that religious teachings should be included as a module in dental curricula, helping to inculcate moral values and code of ethics in dental students.¹

A comparative study was done by Chandrashekar et al to assess the knowledge, attitude and practices related to ethics among medical and dental post graduate students in South India. Results of the study showed that the dental postgraduates have less knowledge of healthcare ethics compared to the medical postgraduates. They emphasized on the need to incorporate a separate module for bioethics in dental curricula.¹² The current study also highlights the need of teaching and evaluating all domains of ethics to the undergraduate dental students, so that they can cope with ethical issues in their practice of dentistry.

A Pakistani study by Nazish et al among medical interns and residents concluded that teaching and training in ethics was not sufficient for the junior doctors to help them deal competently with the healthcare ethics.¹³ Thus, the current study was conducted among 3rd and 4th year students of dentistry, which showed that teaching all domains of ethics is essential to help equip them to effectively deal with future problems.

Chughtai et al also laid emphasis on the need to assess the ethical sensitivity of the students before they begin their clinical experiences. They conducted a vignette-based study on freshly graduated dentists to determine the ethical sensitivity. A total 53% of the

graduates were ethically sensitive whereas 47% were partially sensitive.⁸ In our study, it was necessary to determine the sensitivity of dental students before they begin their professional experience, assessing each ethical principle separately to be able to better teach students according to their needs.

Tabei et al investigated the awareness of dental students (who passed their basic course) concerning patients' rights and principles of ethics in dentistry. About 71% of the students believed they had knowledge of medical ethics.¹⁴ Which is in agreement with the current study. The present study is limited to the knowledge of students regarding ethics, and patients' rights regarding healthcare services are not included.

The findings of the study are limited as the study has been conducted in a private sector dental college. There is a need to further conduct this study in various other dental colleges of the province or the country to rightly assess the ethical sensitivity of students coming from various ethnicities and teach them in a manner suited to their needs for efficient clinical practice.

CONCLUSION

The study shows that generally students lack the attitude to practice autonomy and justice. Keeping with the norms where the literacy rate happens to be very low, it is understood that patients would not have as much knowledge to take decisions. This leads to a greater role of doctors in patients' decisions regarding management. In conclusion, ethics should be included in the dental curriculum in dental colleges all over Pakistan, not only as a topic but as a separate subject which is examined and evaluated.

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