

# Awareness of Ethical Principles, Professional Behavior, and Ethical Treatment of Patients Among Medical and Dental Students

Fehim Haliti<sup>1\*</sup>, Dion Haliti<sup>2</sup>, Dea Haliti<sup>2</sup>

<sup>1</sup>*Department of Pediatric and Preventive Dentistry, University of Prishtina, School of Dental Medicine, Prishtina, Kosovo*

<sup>2</sup>*Faculty of Medicine, University of Prishtina "Hasan Prishtina", Prishtina, Kosovo*

## Abstract

As future healthcare professionals, medical and dentistry students have an ethical responsibility to establish higher standards of ethics and professionalism in their interactions with patients. Therefore, expanding their knowledge and awareness of ethical concepts, professional behavior, and ethical patient treatment is essential. The aim of this research was to gather information about general medicine and dentistry students' awareness of ethical concepts, professional behavior, and ethical patient treatment. The questionnaire included 16 questions divided into four sections. The study found that most students agreed with basic professional health ethical principles, and that there was no significant difference between the students' directions (general medicine or dentistry) and the year of study (first and fourth). In this research, general medicine and dental students, in general, indicated a good level of awareness of ethical principles, professional behavior, and ethical patient treatment. (**International Journal of Biomedicine. 2023;13(2):333-337.**)

**Keywords:** bioethics • professional behavior • dentistry • general medicine • students

**For citation:** Haliti F, Haliti D, Haliti D. Awareness of Ethical Principles, Professional Behavior, and Ethical Treatment of Patients Among Medical and Dental Students. International Journal of Biomedicine. 2023;13(2):333-337. doi:10.21103/Article13(2)\_OA25

## Introduction

Bioethics is a field of study that focuses on ethical issues arising from advancements in technology, medicine, and biology.<sup>(1)</sup> The discipline of medical ethics evaluates clinical medicine and associated scientific research, based on a set of principles that healthcare professionals can refer to in times of uncertainty or disagreement.<sup>(2)</sup> These principles include respect for autonomy, non-maleficence, beneficence, and justice. The Hippocratic Oath, the Declaration of Helsinki (1964), and The Nuremberg Code (1947) provide basic ethical guidelines for healthcare professionals.<sup>(3-5)</sup> Bioethics aims to integrate beneficence, autonomy, and justice in issues related to euthanasia, confidentiality, consent forms, and potential conflicts of interest in healthcare.<sup>(6)</sup>

The Medical Faculty (Department of General Medicine and Department of Dentistry) of the University of Prishtina include study program courses in ethics during the first semester of the first year of study, comprising 15 lectures and 15 seminary practices. This enables students to learn about the aims, objectives, and phases of bioethics and deontology, as well as patient confidentiality and the responsibilities of doctors toward their patients.

## Materials and Methods

This study collected data from first- and fourth-year students at the Medical Faculty of the University of Prishtina. The questionnaire included 16 questions divided into four sections. The first section contained three descriptive questions regarding basic professional ethical principles in dentistry for dentistry students (DS) and general medicine students (GMS). The second section consisted of questions related to basic professional ethical principles in dentistry for GMS and DS by years of study. The third section contained questions related

---

\*Corresponding author: Prof. Ass. Dr. Fehim Haliti, Department of Pediatric and Preventive Dentistry, University of Prishtina School of Dental Medicine, Prishtina, Kosovo. Email: [feh.haliti@uni-pr.edu](mailto:feh.haliti@uni-pr.edu)

to the professional behavior of dentists for DS and GMS. The fourth section included questions about the professional behavior of dentists for GMS and DS by years of study.

Statistical analysis was performed using statistical software package SPSS version 22.0 (SPSS Inc, Armonk, NY: IBM Corp.). Categorical variables were analyzed using the Chisquare test or, alternatively, Fisher's exact test when expected cell counts were less than 5. A probability value of  $P < 0.05$  was considered statistically significant.

## Results

The study involved 131 DS and 170 GMS from the Faculty of Medicine in their first and fourth years. Of the total students enrolled in the study, 33.2% were male, while 66.8% were female (Table 1).

**Table 1.**

*Characteristics of the students involved in the study.*

	First year		Fourth year		Total	
	n	%	n	%	n	%
Total	145	100	156	100	301	100
<u>Directions</u>						
General Medicine	82	56.6	88	56.4	170	56.5
Dentistry	63	43.4	68	43.6	131	43.5
<u>Gender</u>						
Male	35	24.1	65	41.7	100	33.2
Female	110	75.9	91	58.3	201	66.8

### Questions related to the basic ethical principles for dentists

Regarding the statement that «The basic professional ethical principles in dentistry are patient autonomy, do not

harm, do good, justice, and accuracy,» the rate of agreement (Strongly agree or agree) was 97.3% for the students included in this research, without significant difference according to the directions (general medicine or dentistry) ( $P=1.0000$ ) (Table 2) or the year of study of DS ( $P=0.2453$ ) and with significant difference according to the year of study of GMS ( $P=0.0245$ ) (Table 3).

Regarding the statement that «Principles are abstract; their application is concrete but open to interpretation,» 70.4% of the students agreed (Strongly agree or agree) with a significant difference between GMS and DS ( $P=0.0062$ ) (Table 2) but without significant difference according to the years of study of GMS ( $P=0.6483$ ) and DS ( $P=0.8434$ ) (Table 3).

Concerning the statement that «Health professionals are obliged to provide health services that are within the standards of dental health care and within the professional skills of the dentist,» 95.7% of the students agreed, without significant difference between GMS and DS ( $P=0.4032$ ) (Table 2) or the year of study of DS ( $P=0.6203$ ) and with significant difference according to the year of study of GMS ( $P=0.0011$ ) (Table 3).

### Questions related to the dentist's professional behavior

Regarding the statement that «Doctor/dentist has obligations to patients, coworkers, and the community wherein they live and interact,» 97.0% of the students included in the research agreed (Strongly agree or agree) without significant differences according to the directions ( $P=1.0000$ ) (Table 4) or the year of study of DS ( $P=0.6203$ ) and with significant difference according to the year of study of GMS ( $P=0.0245$ ) (Table 5).

Concerning the opinion that «Doctor/dentist is obligated to inform the patient about the procedures they received and the qualified medical personnel who provided those procedures» because the patient has the right to ask

**Table 2.**

*Questions related to basic ethical principles for dentists according to directions (general medicine or dentistry).*

Basic professional health ethical principles		GMS		DS		Total		P-value
		n	%	n	%	n	%	
	Total	170	100.0	131	100.0	301	100.0	
The basic professional ethical principles in dentistry are patient autonomy, do not harm, do good, justice, and accuracy	Strongly agree/ Agree	165	97.1	128	97.7	293	97.3	*1.0000
Principles are abstract; their application is concrete but open to interpretation	Strongly agree/ Agree	109	64.1	103	78.6	212	70.4	0.0062
Health professionals are obliged to provide health services that are within the standards of dental health care and within the professional skills of the dentist	Strongly agree/ Agree	161	94.7	127	96.9	288	95.7	*0.4032

\*- Fisher's exact test

questions about the treatment offered and the professional health personnel responsible for the treatment, 91.7% of the students agreed (Strongly agree or agree) without significant difference according to directions ( $P=0.4281$ ) (Table 4) or the year of study of DS ( $P=0.4952$ ) and with significant difference

according to the year of study of GMS ( $P=0.0073$ ) (Table 5).

In response to the statement that «Any complications with the patient’s health care or mistakes the doctor/dentist made during the health procedure should be disclosed to the patient,» 71.1% of the students agreed (Strongly agree

**Table 3.**

**Questions related to the doctors/dentist’s professional behavior according to directions and years of the study**

Basic professional health ethical principles		GMS					DS				
		First year		Fourth year		P-value	First year		Fourth year		P-value
		n	%	n	%		n	%	n	%	
	Total	82	100.0	88	100.0		63	100.0	68	100.0	
The basic professional ethical principles in dentistry are patient autonomy, do not harm, do good, justice, and accuracy	Strongly agree/ Agree	77	93.9	88	100.0	*0.0245	63	100.0	65	95.6	*0.2453
Principles are abstract; their application is concrete but open to interpretation	Strongly agree/ Agree	54	65.9	55	62.5	0.6483	50	79.4	53	77.9	0.8434
Health professionals are obliged to provide health services that are within the standards of dental health care and within the professional skills of the dentist	Strongly agree/ Agree	73	89.0	88	100.0	*0.0011	62	98.4	65	95.6	*0.6203

\*- Fisher’s exact test

**Table 4.**

**Questions related to the doctors/dentist’s professional behavior according to directions and years of the study**

Doctor/dentist’s professional behavior		GMS		DS		Total		P-value
		n	%	n	%	n	%	
	Total	170	100.0	131	100.0	301	100.0	
Doctor/dentist has obligations to patients, coworkers, and the community wherein they live and interact	Strongly agree/ Agree	165	97.1	127	96.9	292	97.0	*1.0000
Doctor/dentist is obligated to inform the patient about the procedures they received and the qualified medical personnel who provided those procedures	Strongly agree/ Agree	154	90.6	122	93.1	276	91.7	0.4281
Any complications with the patient’s health care or mistakes the doctor/dentist made during the health procedure should be disclosed to the patient	Strongly agree/ Agree	137	80.6	77	58.8	214	71.1	0.000
Doctor/dentist has an ethical responsibility to be truthful, and it is unethical for him to withhold information	Strongly agree/ Agree	150	88.2	112	85.5	262	87.0	0.4830
The difference between the complication of the procedure and the mistake-negligence, and the lack of professional skills of the dentist are aspects that involve legal interpretation.	Strongly agree/ Agree	154	90.6	104	79.4	258	85.7	0.0059

\*- Fisher’s exact test

or agree), with significant difference according to directions ( $P=0.000$ ) (Table 4) and the year of study of GMS ( $P=0.0218$ ) and DS ( $P=0.000$ ) (Table 5).

The «Doctor/dentist has an ethical responsibility to be truthful, and it is unethical for him to withhold information» statement evoked agreement by 87.0% of the students (Strongly agree or agree) without significant difference between GMS and DS ( $P=0.4830$ ) and by years of study of DS ( $P=0.5722$ ), but a significant difference according to the years of study of GMS ( $P=0.0158$ ).

Agreement with the statement that «The difference between the complication of the procedure, on the one hand, and the dentist's mistake/negligence or lack of professional skills, on the other, are aspects that involve legal interpretation» was reported by 85.7% of the students with a significant difference between GMS and DS ( $P=0.0059$ ) (Table 4) and the years of study of GMS ( $P=0.0011$ ) and a non-significant difference according to the years of study of DS ( $P=0.0850$ ) (Table 5).

## Discussion

This study highlights the importance of ethical knowledge in medical and dental education and the importance of integrating ethical education into medical and dental curricula to understand better the principles of ethics and the essential role of the doctor-patient relationship. The ethical framework of interactions between doctors, dentists, and patients is crucial in ensuring better outcomes for all parties involved.<sup>(7)</sup>

By integrating bioethics into the undergraduate curriculum, future generations of doctors and dentists will be better equipped to meet the high ethical standards required in their profession.<sup>(8)</sup> The study also found that participants agreed with the principles of ethics, indicating adequate ethical education. Medical education is responsible for prioritizing ethics to ensure that the profession continues to uphold its high standards of professionalism.<sup>(9)</sup>

**Table 5.**

**Questions related to the professional behavior of the doctors/dentist according to the directions and year of studies**

Doctor/dentist's professional behavior		GMS					DS				
		First year		Fourth year		P-value	First year		Fourth year		P-value
		n	%	n	%		n	%	n	%	
	Total	82	100.0	88	100.0		63	100.0	68	100.0	
Doctor/dentist has obligations to patients, coworkers, and the community wherein they live and interact	Strongly agree/ Agree	77	93.9	88	100.0	*0.0245	62	98.4	65	95.6	*0.6203
Doctor/dentist is obligated to inform the patient about the procedures they received and the qualified medical personnel who provided those procedures	Strongly agree/ Agree	69	84.1	85	96.6	*0.0073	60	95.2	62	91.2	*0.4952
Any complications with the patient's health care or mistakes the doctor/dentist made during the health procedure should be disclosed to the patient	Strongly agree/ Agree	73	89.0	86	97.7	*0.0218	63	100.0	52	76.5	*0.000
Doctor/dentist has an ethical responsibility to be truthful, and it is unethical for him to withhold information	Strongly agree/ Agree	67	81.7	83	94.3	*0.0158	55	87.3	57	83.8	0.5722
The difference between the complication of the procedure and the mistake-negligence, and the lack of professional skills of the dentist are aspects that involve legal interpretation.	Strongly agree/ Agree	68	82.9	86	97.7	*0.0011	54	85.7	50	73.5	0.0850

\*- Fisher's exact test

## Conclusion

By integrating bioethics into the undergraduate curriculum, future generations of dentists and doctors will achieve high professionalism and ethical standards. Ethical education should be an ongoing process throughout a healthcare professional's career to ensure they maintain high ethical standards that benefit patients and the broader community.

## Competing Interests

The authors declare that they have no competing interests.

## References

1. Sass HM. Fritz Jahr's 1927 concept of bioethics. *Kennedy Inst Ethics J*. 2007 Dec;17(4):279-95. doi: 10.1353/ken.2008.0006.
  2. Beauchamp TL. (2019). A Defense of Universal Principles in Biomedical Ethics. In: Valdés, E., Lecaros, J. (eds) *Biolaw and Policy in the Twenty-First Century*. International Library of Ethics, Law, and the New Medicine, vol 78. Springer, Cham. [https://doi.org/10.1007/978-3-030-05903-3\\_1](https://doi.org/10.1007/978-3-030-05903-3_1)
  3. Berdine G. The Hippocratic Oath and Principles of Medical Ethics. *The Chronicles* [Internet]. 2015Jan.10
  4. World Medical Association. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *JAMA*. 2013 Nov 27;310(20):2191-4. doi: 10.1001/jama.2013.281053.
  5. Shuster E. Fifty years later: the significance of the Nuremberg Code. *N Engl J Med*. 1997 Nov 13;337(20):1436-40. doi: 10.1056/NEJM199711133372006.
  6. Ruger JP. Good medical ethics, justice and provincial globalism. *J Med Ethics*. 2015 Jan;41(1):103-6. doi: 10.1136/medethics-2014-102356.
  7. Sinha P, Chourey N, Hiremath RN, Ghodke S, Sharma A, Vaswani P. Knowledge and practices of bioethics - Need for periodic assessment and reinstatement for budding family physicians. *J Family Med Prim Care*. 2022 Jul;11(7):3901-3904. doi: 10.4103/jfmpe.jfmpe\_2042\_21.
  8. Ustrell-Torrent JM, Buxarrais-Estrada MR, Ustrell-TorrentRiutord-Sbert P. Ethical relationship in the dentist-patient interaction. *J Clin Exp Dent*. 2021 Jan 1;13(1):e61-e66. doi: 10.4317/jced.57597.
  9. Boon K, Turner J. Ethical and professional conduct of medical students: review of current assessment measures and controversies. *J Med Ethics*. 2004 Apr;30(2):221-6. doi: 10.1136/jme.2002.002618.
-