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### ETHICAL ISSUES, DISCRIMINATION AND SOCIAL RESPONSIBILITY RELATED TO HIV-INFECTED PATIENTS

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# Ethical Issues, Discrimination and Social Responsibility Related to HIV-Infected Patients

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## Abstract

The aim of the present study was to assess the attitude of students attending 4th and 6th year of the Faculty of Dental Medicine in Iasi towards HIV-seropositive patients. A questionnaire was elaborated, containing 14 ethic statements related to some aspects they may encounter in their future career: the observance of confidentiality and the rights of HIV/AIDS infected patients, the refusal of dedicated treatment and the appreciation of discrimination in this situation. The results have identified some negative aspects regarding the above mentioned issues, mainly in terms of the refusal of specialized treatment. A percentage between 47.4% and 38.4% of the students strongly agreed to the affirmations according to which

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the risk of cross-infection and the lack of some safety conditions at work may be a reason for the refusal to provide dental treatment. The responses referring to discrimination suggest that there is a negative attitude towards the following aspects: the treatment of HIV-infected patients in different offices, the refusal to continue treatment after confirmation of the diagnosis, the refusal to cooperate with an infected colleague. Only 57.8% of the subjects considered the refusal of treatment as discrimination, with no statistical differences between the years of study. The results suggest both the need to modify the academic curriculum by introducing some ethics and medical legislation courses, and the adoption of a strategy for the increase of empathy and social responsibility in relation to this group of discriminated persons.

*Keywords:* discrimination, ethical issues, social responsibility, HIV/AIDS, dental students.

## Introduction

The infection with the human immunodeficiency virus represents a major public health issue while the latest statistic data supplied by the World Health Organization shows that at the end of 2019 there were 38 million infected persons, of which 1.8 million were children aged below 15. Africa remains the continent with the highest prevalence (25.7 million infected persons in 2019), whereas in Europe the number of infected persons reaches 2.5 million (World Health Organization, 2020).

In Romania, according to the data provided by “Professor Dr Matei Bals” Institute of Infectious Diseases, there has been a decreasing trend of the number of new infected persons in the last 5 years, from 967 in 2013, to 692 in 2017 and 506 in 2019 (Institute of Infectious Diseases “Professor Dr Matei Bals”, 2020). According to the WHO data, in 2019, there were 19.000 infected persons in Romania (World Health Organization, 2020). However, many cases are still undiagnosed, which calls into question this reduced figure. Despite the progress obtained in terms of maternal-fetal transmission, there are still many unsolved aspects relating to the retroviral therapy, the complications determined by the weakening of the immune system, the psychological, social and economic effects both at individual and collective levels (Singh *et al.*, 2017).

The ethic dilemmas related to the treatment of HIV/AIDS infected patients represent an inevitable component of the medical activity, which may be encountered by any dentist in the career. Although there are currently safe methods for the prevention of contamination in the dental office, fear and irrational emotions to treat infected patients are a reality encountered in many dentists, raising numerous ethical and legislative issues (Barlean *et al.*, 2012; Centers for Disease Control and

Prevention, 2016). Consequently, the HIV-infected persons face discrimination when they need to benefit from specialized medical treatments, with serious adverse effects on their physical and psycho-emotional status (Patel *et al.*, 2015; Saheer *et al.*, 2019).

There are numerous papers trying to explore the ethical limits of rights and obligations of the HIV-seropositive patients and physicians. Doyal (1997) showed that treating the seropositive patients without any trace of discrimination is a mandatory professional obligation. According to the same author, patients showing signs of HIV infection should be guided to have blood tests, but only with their consent; dentists have the professional duty to provide information about patient's seropositive status only to the relevant authorities and not to the public. Doyal found that some dentists considered that patient's rights were exaggerated while physician's rights were minimized. From their point of view, physicians should have the autonomy and right to select their patients, and, consequently the right to refuse treatment of HIV-seropositive patients. This argument is unacceptable because physicians must assume the risks they may encounter as belonging to their professional responsibility (Doyal, 1997).

The fear of treating these patients is determined by the lack of knowledge about the ways of transmitting the infection and the oral manifestations of this condition, but also by some practical aspects: the loss of new patients or the abandonment of those undergoing treatment (Brondani *et al.*, 2016). Thus, some dentists consider that they have sufficient and objective "motivations" to refuse their treatment.

The assimilation of some ethical and practical principles starts in the first years of academic training and, at the same time, the first skills related to making decisions develop in this period. It is expected that knowledge eliminates the phobia among the students and prepares them to morally accept the responsibility to provide oral health care to infected patients (Saheer *et al.*, 2019; Nasir *et al.*, 2008). There are numerous papers in the literature analyzing dental students' knowledge about HIV-infected patients, such as the ones conducted in the 1990s in the USA, England (Samaranayake, Figueiredo, & Rowland, 1990) and Japan (Kitaura, Adachi, Kobayashi, & Yamada, 1997) and in 2000, in Brazil (Oliveira, Narendra, & Falcao, 2002), Taiwan (Hu, Lai & Liao, 2004), India (Aggarwal & Panat, 2013), Malaysia (Khan, Liew, & Omar, 2017) and Saudi Arabia (Kumar *et al.*, 2018). On the other hand, the literature has reported few studies in the field of HIV related discrimination and no studies focused on this issue have been reported in Romania so far. In 2019 Alshouibi and Alaqil in a cross-sectional study made in Jeddah, Saudi Arabia, found that the most significant predictors of discrimination included fear of accidental exposure, reluctance to provide treatment to these patients, and self-protective concerns (Alshouibi & Alaqil, 2019). From the patients' point of view, Brondani and colab., showed that there are some evidence of both self-stigma and public stigma among dental patients: fear, self-stigma, offences during encounters with dental care professionals; resilience and reconciliation to achieve quality care for all (Brondani *et al.*, 2016). In fact,

stigma remains a challenge for those living with HIV/ AIDS as it has a negative impact on their lives and well-being.

The aim of this study is to find out the perspective of the future practitioners in terms of some ethic aspects regarding the discrimination of HIV/AIDS infected patients, in the context in which they are in a transition period from the academic environment to the professional one.

## Methodology

The cross-sectional survey was conducted in December 2018-May 2019 on a sample of 141 students attending the Faculty of Dental Medicine in Iasi, of which 69 (49.5 %) were in the 4th year of study, and 72 (50.5%) were in the 6th year of study.

These years of study were selected because in the curriculum of the Faculty of Dental Medicine in Iasi there are several courses focused on the issue of our study; therefore, in the 2nd year of study there is a course of Prevention of infection transmission in the dental practice and the course of Infectious diseases containing a special section dedicated to HIV infection, and in the 5th year of study there is the course of Oral medicine which includes also the pathology of oral cavity in case of HIV patients; in 2nd year there is also a course of Bioethics. The question is if they are prepared to not discriminate HIV-seropositive patients, providing them the necessary treatment.

A questionnaire was developed for the purpose of this study, including 14 questions focused on aspects related to the attitude and bioethics rules regarding treatment of HIV patients. The questionnaire was elaborated according to the similar items cited in literature (Aggarwal & Panat, 2013; Abou, Abdelmoety, Farahat & Hussein, 2019; Saheer *et al.*, 2019). The validity of the questionnaire was assessed by using the Cronbach's alpha index, with a score of 0.72, indicating a moderate degree of internal consistency. The answer to each question was rated on a five point Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree). The study was approved by the ethics committee of the University. Written informed consent was obtained from all respondents prior to participation. Data were analyzed with the SPSS 18.0 system for Windows (SPSS Inc. Chicago, IL, USA). Differences between groups were analyzed with the Pearson chi-square test at the 0.05 level.

## Results

The overall response rate with a fully completed survey questionnaire was 92.1%. The statement for students and the answers are presented in *Table 1*. *Table 2* presents the correct answers according to the year of study.

*Table 1.* Students' attitudes towards patient with HIV/AIDS (%)

Attitude statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Correct answers
1. HIV-infected patients are required to inform their doctor of the disease	90.5	7.1	2.4	-	-	97.6
2. HIV-infected patients must be treated in separate dental offices	21.3	19.3	10.7	12.6	36.1	48.7
3. The dentist has the right to refuse HIV infected patients	16.5	11.8	-	37.8	33.9	71.7
4. The dentist has the right to refuse HIV infected patients if there are not enough medical personnel	47.5	21.8	4.1	11.2	15.4	26.6
5. The dentist has the right to refuse HIV infected patients in the case where there are not adequate work safety conditions	38.4	28.4	3.2	11.3	18.7	30
6. The dentist has the right to refuse HIV infected patients due to the risk of cross infection	47	4	3	7.1	38.4	45.5
7. Residents/Internal students have obligation to treat HIV infected patients	18.2	28.9	10	11.5	31.4	47.1
8. The confidentiality of HIV infected patients is very important code	48.7	23.2	13.1	12.5	2.5	71.9
9. Treatment of patients should be continued after HIV infection is confirmed	21.2	24.2	6.4	25	23.6	45.4
10. The refusal to treat HIV infected patients is a discrimination	47.4	10.4	7.7	16	18.5	57.8
11. I am morally responsible to treat HIV patients	25.1	27.1	12	14.8	21	52.2

12. I can refuse patients because I worry being infected with HIV	12.9	6.7	3.9	37.9	38.6	76.5
13. If I know that my colleague has HIV, I stop working with him/her	6.8	5.3	20.1	43.2	24.6	67.8
14. Providing dental care to HIV-infected individuals can discourage others from seeking care in my dental office	21	29.1	18.3	14.7	16.9	31.6

Table 2. The correct answers according to the year of study (%)

Attitude statement	Correct answers	Correct answers according to the year of study		p value
		4 <sup>th</sup> years	6 <sup>th</sup> years	
1. HIV-infected patients are required to inform their doctor of the disease	97.6	98.7	95.1	0.733
2. HIV-infected patients must be treated in separate dental offices	48.7	42.5	59.5	0.030*
3. The dentist has the right to refuse HIV infected patients	71.7	65.3	78.4	0.089
4. The dentist has the right to refuse HIV infected patients if there are not enough medical personnel	26.6	38.7	25	0.001*
5. The dentist has the right to refuse HIV infected patients in the case where there are not adequate work safety conditions	30	38.8	22.9	0.001*
6. The dentist has the right to refuse HIV infected patients due to the risk of cross infection	45.5	44.2	47	0.076
7. Residents/Internal students have obligation to treat HIV infected patients	47.1	35.3	48.5	0.078
8. The confidentiality of HIV infected patients is very important code	71.9	68.1	72	0.668
9. Treatment of patients should be continued even after HIV infection is confirmed	45.4	40.1	47.8	0.167
10. The refusal to treat HIV infected patients is a discrimination	57.8	54.2	59	0.176

11. I am morally responsible to treat HIV patients	52.2	51.2	53.1	0.211
12. I can refuse patients because I worry being infected with HIV	76.5	64.8	77.1	0.017*
13. If I know that my colleague has HIV, I stop working with him/her	67.8	62.1	69.2	0.378
14. Providing dental care to HIV-infected individuals can discourage others from seeking care in a dental setting	31.6	24	32.7	0.023*

\*Pearson chi-square,  $p < 0.05$

Table 1 shows a positive attitude of students highlighted by the percentage of correct answers, concerning the following aspects: the obligation of patients to declare their disease (statement 1): 97.6%; the dentist's conduct and attitude towards the refusal of infected patients (statement 12): 76.5%; confidentiality (statement 8): 71.9%. 57.8% of students consider that refusing treatment is discrimination (question 10). The first ethic dilemma was related to physician's right to refuse HIV-infected patients (question 3): 71.7% of students answered correctly, as they considered as unethical, immoral and illegal not to treat such patients.

Possible reasons for the rejection of infected patients were added to statements 4, 5 and 6. The correct answers in this sensitive topic were quite surprising: (1) 26.6% considered that the dentist did not have the right to refuse patients in case of insufficient medical staff (statement 4); (2) 30% considered that the dentist did not have the right to refuse patients in case of inadequate working safety conditions (statement 5); (3) 45.5% said that patients could not be rejected for the reason of the risk of cross infection (statement 6).

Less than half of the students did not answer correctly to questions 7, 9 and 14, regarding the obligation of residents to provide dental treatments (47.1% correct answers), to continue treatment after confirmation of diagnosis (45.5% correct answers), and 31.6% believe that in this way they risk losing their patients.

Table 2 shows the statistically significant differences between the answers of students in 4th and 6th years. More students in 6th year compared to their younger colleagues responded correctly to statements referring to: the treatment of patients in separate offices (59.5% vs 42.5%), the obligation of residents to treat patients (48.5% vs. 35.3%), fear of losing patients (32.7% vs 24%).

On the contrary, questions 4 and 5 showed more correct answers for 4th year students than for those in the final year: lack of medical staff (32.7% vs. 29.1%) and inadequate working conditions (38.8% vs 22.9%) are considered "Good reasons" for refusing to treat these subjects.



## Discussion

The fundamental ethical principles governing the profession of a dentist and that of any health practitioners refer to the protection of patients' life and health in any circumstances, the respect of patient's autonomy and of their informed decisions relating to their own health in an impartial and unprejudiced manner (Beauchamp & Childress, 2001; Grigorean *et al.*, 2017). Although there are sufficient legal standards defending patient's rights, the enforcement thereof is annihilated because of the lack of the necessary regulations for the adequate application of the existing legal provisions, of a system of surveillance of the way in which the relevant legislation is complied with, and the lack of an efficient activity of the competent authorities (Cocora, 2003).

According to the Romanian legislation in force, namely the law 584/2002, the patients must inform the attending physician, including the dentist, about their HIV status, if they know it. The HIV infected persons or AIDS patients who are aware of their positive HIV status shall answer, under the law, for the voluntary transmission of the infection, if this occurred out of reasons imputable to them (Legea nr. 584/2002, 2002). This aspect is seen as highly important by a very high percentage of students (97.6%). In what concerns the provision of specialized treatment in separate dental offices, the results of Iasi survey, with 48.7% correct answers, are in opposition to those of a similar survey carried out in 2015 in India, where more than 60% of the students of the Faculty of Dental Medicine considered correctly this aspect (Aggarwal & Panat, 2013). The provision of treatment in separate dental offices may be seen as discrimination and enhance the stigmatization of these patients. In terms of this issue, the distribution of answers to question 10 is surprising since only 47.4% of students strongly agree that the refusal to provide treatment to a HIV infected patient is discrimination.

The refusal to treat such patients is considered as a sensitive topic for the students of the Faculty of Dental Medicine in Iasi: only 47.1% of them agree that the residents or internal students in the final year have the obligation to treat an HIV seropositive patient. A much lower percentage (49.7%) was reported by Aggarwal, in India, in a similar survey (Aggarwal & Panat, 2013). In another study, Vinod, Kavitha, & Karishma (2005) reported that only 36.5% of students answered that they have no obligation to treat infected patients. Furthermore, considering that there may be objective "reasons", they consider that dentists do not have any obligation to provide medical care if adequate and safe work conditions are missing. The arising question is what the lack of safe conditions in the dental office means to them. Regardless of the treated person, the cautionary measures for the prevention of infection transmission in the dental office start from the idea that any patient may be potentially infected and offer a guide for therapeutic conduct (Seacat & Inglehart, 2003).

If we take into account other surveys as well, important differences are observed in Kuwait 63.6% (Ellepola *et al.*, 2011), in Malaysia 43%, (Khan *et al.*, 2017), Sri Lanka 28.1%, Saudi Arabia 21% (Kumar *et al.*, 2018) and in China, 18.9% (Rui *et al.*, 2016).

Numerous organisms and professional associations consider both unethical and illegal the refusal to treat these patients in the dental office (World Health Organization, 1988). Pursuant to article 9 of the law 584/2002, "Medical units and physicians shall, regardless of their specialty, hospitalize and provide medical care in the specialty they have, in accordance with the pathology presented by the patient" (Romanian Parliament, 2002).

The survey results showed that 71.9% of students will observe the confidentiality of the HIV/AIDS infected patients. Confidentiality or professional secrecy represents the obligation of medical professionals to keep the information about patient as confidential when such information is obtained during the normal exercise of their profession. This information (including the ones related to the health state or social status) shall not be disclosed to any other person without their beneficiary's/client's consent, and in case of children, with the consent of their next of kin (Iacob, 2007; Craciun *et al.*, 2017). Pursuant to article 39 from the Criminal code, the violation of confidentiality shall entail disciplinary, civil and even criminal liability (Criminal Code of Romania, 2018).

The violation of confidentiality is a great dilemma in which a person's rights interfere with the need to disclose the information, as in some cases this is necessary and unavoidable (e.g. in case of a person suffering from a psychic disorder, a person without any judgment or when the seropositive person voluntarily infects other persons) (Iacob, 2007). The law is very strict in terms of physicians' refusal to provide medical treatment to HIV/AIDS patients as their obligation is stipulated in the law 46/2003 as well. Thus, the refusal to treat a HIV infected patient is considered as a violation of the law and a discriminatory treatment (Chiriac, 2006).

The survey results confirm the fact that differences exist between the answers of students in different years of study. Such differences were found for statements 4 and 5, where students in the 4th year gave correct answers more frequently than students in the 6th year. Despite that students in their final year have contact with more patients during their clinical internships on which occasion they have the opportunity to acquire more skills, the answers they offered were surprising. This unexplainable attitude of the students of a medical faculty might be rooted in the insufficient knowledge of the specialized information associated to a lack of information in terms of medical ethics and legislation, in the context of the curriculum itself failing to contain courses on this topic.

Worldwide, stigma and discrimination associated with the HIV epidemic are still persistent and both have exceedingly devaluated people living with HIV through exclusion and marginalization (Abou El Fadl *et al.*, 2019). Several studies published within the last ten years have described selfreported beliefs and

behaviours of dentists related to the provision of dental care for HIV infected persons (Yuvaraj *et al.*, 2020). In Saudi Arabia, 67.4% of dentists agreed to some form of HIV discrimination and did not have the confidence to provide surgical dental treatment to people living with HIV (Alsouibi & *et al.*, 2019). In Columbia, only 8% of dental students had an unfavourable attitude towards treating HIV-infected patients (Yuvaraj *et al.*, 2020).

In our study, there were no statistically significant differences between students' responses in different years regarding discrimination against HIV patients (statement 10), suggesting that they are apparently aware of this. However, the answers to other questions that indirectly refer to the same issue suggest a negative attitude related to this sensitive aspect. These refer to the moral responsibility to treat these patients, where only 52.2% responded correctly, and to the fact that only 45.4% agree that treatment should be continued after confirmation of the diagnosis. It is also worrying that 50.1% of them agree that patient refusal is motivated by the possibility of losing existing or future patients.

## Conclusion

The results of this survey highlight the lack of an ethical attitude of both 4th and 6th year students in terms of providing dental treatments to HIV-infected patients. Unfortunately, the discrimination of this population group is caused by the lack of knowledge and prejudices, and things are worse considering that the participants are students of a medical faculty. This survey also shows the deficiencies in the faculty curriculum, because of the lack of courses on medical ethics, deontology and legislation. Students are unaware that their refusal to treat an HIV-infected patient means discrimination that may be punished at criminal, disciplinary or civil levels. Thus, it is necessary not only to revise the curriculum but also to enhance the practical side thereof by meetings with socially disadvantaged, vulnerable and discriminated persons so that the future dentist may acquire moral skills corresponding to the medical profession.

Although this survey has certain limits, the results obtained offer an overview on the perceptions of the students of the Faculty of Dental Medicine in Iasi in relation to this topic and anticipate the future problems they may encounter in their career.

## Recommendations

As a result of the data obtained, in accordance with the results of other studies, we propose the following recommendations to eliminate the discrimination of HIV-infected patients (Grossman & Stangl, 2013; Stafie, 2009): (1) the provision of a thorough theoretical training of students in order to eliminate their fear related to the transmission of infection in the dental office; (2) raising students' awareness

in terms of marginalization of this category of patients; (3) discussion with HIV-seropositive persons in order to find out their perspective as patients; (4) adequate manners of interaction with the patients embarrassed by their own health problems; (5) courses or seminars on the ethical and legislative aspects in force.

### *Acknowledgments*

All authors contributed equally to this paper.

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