A Study Into Malpractices in the Dental Practice in the Town Of Plovdiv – Bulgaria Over A 5-Year Period

Nina Musurlieva[1,*], Maria Stoykova[2] and Silviya Novakova[3]

[1]*Medical University-Plovdiv, Faculty of Public Health, Department of Social Medicine and Public Health*

[2]*Medical University-Plovdiv, Faculty of Public Health, Department of Social Medicine and Public Health*

[3]*Allergy Unit of internal consulting department, University hospital St. George, Plovdiv, Bulgaria*

Abstract: In their work, dentists sometimes allow malpractices to occur. The aim of this study is to investigate the nature of the "adverse consequences" that may serve as grounds for claims from patients to the Professional Ethics Commission (PEC) and the Regional College (RC) of the Bulgarian Dental Association (BDA) in Plovdiv, Bulgaria. Material and methods: The documental method has been applied in investigating retrospectively 42 claims from patients to PEC-Plovdiv, filed in the period from 2011 to 2016, and the findings have been compared to those of similar investigations in Tehran and Turkey. Results and discussion: After an in-depth analysis, it was established that the actions that had resulted in claims filed with PEC-Plovdiv, were 'errors' in: prosthetics – 34%; surgical treatment – 6%; infringement of the rights of the patient (mostly – administered treatment without the informed consent of the patient) – 10%; mounting implants – 50% (prostheses and surgical treatment as part of implantology are also included here). According to foreign publications, errors in prostheses and surgical interventions are the most common. The same errors have been found to be the most common in Plovdiv, too, in addition to errors in implantology. In Bulgaria, as well as in many other countries, there is no register of dental malpractices. Conclusion: The adverse consequences of dental treatment have been established to be of the same origin in the 3 surveyed regions. The safety strategies are designed to prevent unintentional injuries to the patient.

Keywords: Error, dental practice, malpractice, register.

1. INTRODUCTION

It is a challenge to clinical practitioners to recommend the best possible treatment option. The lack of in-depth knowledge and understanding of the stumbling stones in the profession, that is, situations that may result in malpractices, leads to an increase in the incidence of 'errors'. In this regard, (Brennan, Leape *et al*, 2005) have carried out research connected with patient safety [1]. Patient safety developed into a scientific discipline when injuries, unnecessarily caused to patients, started to be recorded and the results from their prevention began to be assessed. After the two major events connected with safety at the end of the 20th century: Brennan and Leape's research at Harvard Medical School and the publication of "To Err Is Human" by the American Medical Institute, most health associations began to regard patient safety as one of the main areas of activity [2, 3]. In 2004, the WHO proposed a series of relevant initiatives adopted by many member-countries. The World Alliance for Patient Safety (Forward programme 2006-2007) was set up and a special safety program has been developed. Regular meetings have been organized. At the meeting in London, in March 2016, the safety concept was established as a priority of all healthcare systems. The aim is for new strategies to be developed, strategies, which will coordinate the efforts towards ensuring patient safety on a global scale. Mrs. Margaret Chan, General Director of WHO, summarized five concrete action points connected with policies for improving patient safety (Patient Safety Global action summit 9-10 march 2016). A report entitled 'Patient safety 2030' was presented. The idea is that a change in conduct is the main tool for improving patient safety in the next 15 years. The widespread use of smartphones and social networking sites was identified as a great potential for assessing safety and identifying the sources of risks [4]. The 15th anniversary of the establishment of the patient safety movement and the publishing of "To Err Is Human" (1999), which was provoked by the idea to reduce iatrogenic injuries and harm caused by medical intervention [5]. All this emphasizes the important role which statesmen and health specialists all over the world assign to patient safety.

Like all other medical specialists, dentists also occasionally make mistakes that have adverse consequences (malpractice). In 1961, the Council of European Dentists (CED) was set up. Its purpose is to encourage the implementation of modern standards in dental health care and the promotion of effective professional practices in Europe. In this regard, the Directive on patient safety (2005/36) was adopted. In

*Address correspondence to this author at the Department of Social Medicine and Public Health, Faculty of Public Health, Medical University of Plovdiv, 15A Vassil Aprilov blvd., Plovdiv 4002, Bulgaria; Tel: +359 888 312 499;
E-mail: nina_mussurlieva@abv.bg

E-ISSN: 2311-8695/17

2008, with a special resolution, CED approved recommendations to the member-countries: safety should be incorporated in the educational and training curricula; dentists should be well acquainted with the safety risks; dentists and their teams should take part in continuous training on safety issues; medical specialists should be fluent in languages so as to be able to communicate with patients and colleagues from all over the world; the security of processing and storing patients' data should be ensured, in accordance with the national legislation; Official registers of the qualifications of dentists should be kept; the transparency of the qualifications and competences of all members of the team of dental specialists should be guaranteed, in accordance with the local legislation; at local level, discussion forums should be organized so that ideas could be exchanged; national systems for voluntary and anonymous reporting of malpractices should be introduced so that dentists could have the opportunity to learn not only from their own experiences but also from those of colleagues; the compliance with the ethical code of CED and the national ethical codes should be promoted as it guarantees high quality and safety.

With regard to safety, Observatory for Dental Patient Safety (OESPO) was established in Spain, and a national plan for the prophylaxis of risks arising from dental care was adopted [6]. In 2003, the Agency for Healthcare Research & Quality in the USA developed a quadrilateral framework of initiatives for patient safety. In 2004 in the UK, NPSA (the National Patient Safety Agency), through its NRLS (National Reporting and Learning System), developed: 'seven steps to patient safety'. Each guide in the series provides a checklist to help staff to plan their activities and measure patient safety performance. Since 2010, it has been mandatory to report serious incidents leading to severe injuries or death [7]. With regard to other incidents, their reporting is optional, but a survey in 2008 emphasizes the insignificant number of incidents reported by dentists in England and Wales [8]. Since 2007, a voluntary and anonymous reporting system for patient safety incidents (HaiPro) has been functioning in Finland. A survey shows, however, that only 6% of the surveyed dentists have used the system. The reason was that the majority of them either had no access to the system or were not aware it existed [9].

There is no such system in Bulgaria. It is relied on the Executive Agency for Medical Audit, set up in January 2010. The purpose is to create a database on the quality of healthcare and to contribute to the creation and implementation of a system for reporting and preventing medical malpractices. Unfortunately, to date no such system has been developed.

According to Perea-Pérez *et al*., since dental care and services are provided in independent dental surgeries, 'errors' usually remain 'confined' there. Therefore, the authors recommend anonymous reporting, which would probably contribute to other colleagues learning about such 'errors (malpractices)' and trying to avoid making such 'errors' themselves.

In Bulgaria, one of the sources of information on dental malpractices are the protocols of the Ethics Commission. However, they are confidential and can be accessed only with special authorization.

1.1. This Study is Aimed

Establishing the nature of the 'adverse consequences' that have given rise to claims filed with the Professional Ethics Commission (PEC) and the Regional College (RC) of the Bulgarian Dental Association (BDA) in Plovdiv, Bulgaria, and comparing the findings with those of similar surveys in other countries.

2. MATERIAL AND METHODS

The documental method has been applied in investigating retrospectively 42 claims from patients to PEC-Plovdiv, Bulgaria, filed in the period from 2011 to 2016.

3. RESULTS AND DISCUSSION

Similar investigations have been carried out in Tehran and Turkey [10, 11]. The published findings of those investigations have been compared with the findings of the survey in Plovdiv. (Table **1**)

Of the 42 claims filed in Plovdiv, 30 have been sanctions by the Commission or have been submitted to the court. The remaining claims were found to be unjustified and unwarranted, that is, the respective actions were not considered to constitute malpractice. Because the opinion of the patients can be very subjective, each situation is discussed by the Commission in a highly professional manner, and, when needed, external experts are asked to provide advice.

An analysis of the data provided in Table **1** leads to the following conclusions:

Table 1: Comparison of Types of Malpractice in Bulgaria, Turkey and Iran

	Plovdiv, Bulgaria	Tehran, Iran	Turkey
	2011-2016	2002 and 2006 [12]	1991 – 2000 [16]
Source	Minutes of PEC – Plovdiv, of resolutions of the Professional Ethics Commission.	Resolutions on cases of "malpractice" of the Commissions of Experts at Tehran's Legal Medicine Organization and Islamic Republic of Iran's Medical Council.	Resolutions on cases of "malpractice" of the High Health Council in the Republic of Turkey.
Malpractice	Violation of the rules of the good dental practice:	1. The greatest number of claims are about:	1.46% of the claims concern surgical treatment
	1. Errors in prosthodontics – 34%	- Fixed prosthetics	2.36% of the claims concern prosthodontics
	2. Adverse events during surgical treatment – 6%	- Surgical intervention	3.18% concern orthodontic treatment.
	3. Infringement upon patient rights (e.g., treatment without informed consent) 10%	2. In:	Two of the cases have been fatal.
	4. Violation of the working protocol for implants – 50%.	-56,7% of the clinical cases	
		- 40% of the non-clinical cases it has been established that it is the dentists' fault, general practitioners, in particular.	
Sanctions and penalties	1. Ten penal rulings for administrative penalties have been issued.	1. For 5 years, 412 resolutions on malpractices have been passed.	1. HHC gave its opinion:
	2. Two cases have been submitted to the court, but have not been closed yet.		- In 4 cases, prior to the initiation of proceedings;
			- In 5 cases – in the course of the criminal proceedings;
			- In 2 of the cases – during the litigation.

- Malpractice occurs in dental practices everywhere in the world. Such cases can be of various nature.

The most common errors are those made in prosthodontics and surgical treatment. This is the case in Plovdiv, Tehran and Turkey. The situation in England and Wales is slightly different. The NRLS (the national system in England and Wels for anonymous reporting of patient safety incidents) published a data base for 2009, containing all reported incidents: oral surgery-4.9%; endodontics -3.2%; prosthodontics–2.5%; pediatric dental medicine–1.2%; orthodontics-0.7%; periodontology - 0.3%; tooth extraction -14.3%; surgical intervention in children –10.3%; surgical interventions during orthodontic treatment – 8.2%; medical specialists working in the field of dental medicine – 9.4%; other -44.9% [12]. Evidently, the greatest number of incidents are in the sphere of surgical treatment and interventions. When the bodies in charge of analyzing adverse incidents have a reporting system in place, they can carry out such a detailed analysis. In Bulgaria, we have to rely on randomly filed claims by patients, as there is no specialized system for malpractice monitoring, therefore, many cases remain undisclosed. Due to the different method of reporting and recording incidents with adverse consequences, no comparison between the English and the Bulgarian data is made in this article. Nevertheless, it is of note that the situation in Plovdiv is slightly different–50% of the mistakes made were connected with implanting, but these also include mistakes made in the surgical treatment and prosthodontics, constituting an integral part of the implantation; 34% of the errors were in the sphere of prosthodontics**;** 6% - during the surgical treatment; 10% - infringement upon the rights of the patients. The causes for the most common errors in implantology (as the findings of the Executive Agency for Medical Audit show) may be rooted in the lack of medical standards in Dental Implantology, which is in conflict with the resolution of CED of 2008, namely: 'To ensure the official registration of the qualifications of dentist's. In 2014, the Bulgarian Dental Association set up a working group assigned with the task of developing a medical standard in implantology; this

standard, however, has not been approved and adopted yet. This creates opportunities for people without the required qualifications who are not acquainted with and do not comply with the protocol for dental implant procedures and the rules for good medical practices.

- In Bulgaria there is no register for dental incidents with adverse consequences /dental malpractices/, as is the case in many other countries.

In this regard, the recommendations of Bernardo Perea-Pérez *et al,* are especially appropriate. As the adverse incidents during dental treatment that can be prevented result from a relatively limited number of causes, the authors believe that several basic procedures may considerably curb them. For the purpose, there should be a protocol in every dental surgery that the dentist should conform with: to ensure the quality of clinical records; to exercise regular control of the hygiene and sterilization; for the dentist to exercise caution when prescribing medicines; to comply with the instructions for imaging tests; not to allow for disposable instruments and materials to be re-used; to make sure that the eyes of both the dentist and the patient are protected; to make sure that there are protective barriers in place, which prevent the ingestion or inhalation of small instruments; to monitor the development of infections in the oral cavity; for the dentist to be prepared at any time for possible life-threatening emergencies. In connection with this, a uniform standard for actions in emergency situations should be developed and introduced, and a copy of it should be displayed in a prominent place in every dental surgery. In the protocol of the Spanish colleagues for emergencies there are concrete tasks for each member of the team.

In Bulgaria there is Emergency Medical Services Protocol. It is required to be displayed in a prominent place in dental surgeries because it provides instructions for actions in emergencies. It is also required that there should be and 'emergency cabinet'- a cabinet containing all the medicines needed in an emergency – which is inspected on a regular basis by the Health Insurance Fund inspectors. Plovdiv Regional College of the Bulgarian Dental Association regularly organizes Emergency Aid courses for dentists so as to keep their level of preparedness is up to the required standards thus ensuring patient safety, but still, there is a great deal to be desired.

- Emergency Medical Services Protocols help dentists in their work and enhance patient safety.

CONCLUSION

The results of the study show that the mistakes made in the dental practice are almost the same in the different countries. The lack of strict rules and a respective license for providing certain services contributes to the occurrence of incidents with adverse consequences. Like all other medical specialists, dentist are morally and legally obliged to protect patients from harm and injuries in the course of performing their work. Safety strategies are aimed at preventing patients from suffering unintended harm and injuries as a result of health care. To this end, however, these strategies have to be structured by the relevant Associations in the different countries and monitored by the competent institutions. In order to avoid adverse consequences for patients, all such incidents have to be reported, recorded and brought to the attention of the dental society, without disclosing the names of the respective dentists in whose practices the incidents happened. The raised awareness of the potential risks will reduce the number of cases of malpractice.

REFERENCES

[1] Angela Yu, Kelsey F, Chainani N, Fontana G and Darzi A. Patient safety 2030. London, UK: NIHR Imperial Patient Safety Translational Research Centre, 2016.

[2] Perea-Pérez B, Santiago-Sáez A, Garcia-Marin F, *et al*. Patient safety in dentistry: Dental care risk management plan. Med Oral Patol Oral Cir Bucal 2011; 16(6): 805-9. https://doi.org/10.4317/medoral.17085

[3] Leape L and Berwick D. Five years after "To Err is Human" What have we learned? JAMA 2005; 293: 2384-2390. https://doi.org/10.1001/jama.293.19.2384

[4] Angela Yu, Kelsey F, Chainani N, Fontana G and Darzi A. Patient safety 2030. London, UK: NIHR Imperial Patient Safety Translational Research Centre 2016.

[5] Kohn L, Corrigan J and Donaldson M. To Err is Human. Institute of Medicine (US) Committee on Quality of Health Care in America Washigton, (DC): National Academies Press (US); 2000. https://doi.org/10.17226/9728

[6] Perea-Pérez B, Labajo-González E, Acosta-Gío E, et al. Eleven Basic Procedures/Practices for Dental Patient Safety. J Patient Saf Lippincott Williams and Wilkins 2015; 2015.

[7] Pemberton M. Developing patient safety in dentistry; British Dental Journal 2014; 217: 335-337. Published online: 10 October 2014. https://doi.org/10.1038/sj.bdj.2014.856

[8] Catchpole K, Bell M and Johnson S. Safety in anaesthesia: a study of 12,606 reported incidents from the UK National Reporting and Learning System. Anaesthesia 2008; 63: 340-346. https://doi.org/10.1111/j.1365-2044.2007.05427.x

[9] Hiivala N, Mussalo-Rauhamaa H and Murtomaa H. Patient safety incident prevention and management among Finnish dentists. Acta Odontol Scand 2013; 71: 1663-1670. https://doi.org/10.3109/00016357.2013.797103

[10] Ozdemir M, Saracoglu A and Ozdemir A. Dental malpractice cases in Turkey during 1991-2000. Journal of Clinical Forensic Medicine 2005; 12(3): 137-42. https://doi.org/10.1016/j.jcfm.2005.01.003

[11] Kiani M and Sheikhazadi A. A five-year survey for dental malpractice claims in Tehran, Iran. Journal of Forensic and Legal Medicine 2009; 16(2): 76-82. https://doi.org/10.1016/j.jflm.2008.08.016

[12] Thusu S, Panesar S and Bed R. Patient safety in dentistry – state of play as revealed by a national database of errors. British Dental Journal 2012; 213: E3. Published online: 10 August 2012. https://doi.org/10.1038/sj.bdj.2012.669

Received on 09-11-2017 Accepted on 21-11-2017 Published on 31-12-2017

DOI: https://doi.org/10.12974/2311-8695.2017.05.02.5