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Complaints against Dentists Working in Mashhad, Iran; 2012-2017

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Abstract

Background: The analysis of complaints against health professionals assists in improving health care services. The objective of this study was to evaluate complaints against dentists working in Mashhad, Iran during 2012-2017.

Methods: In this study, all the available completed dental complaint cases from the archive of the Mashhad Medical Council addressed within a six-year time period (from 2012 through 2017) were reviewed. The required information was extracted based on a checklist including variables such as the gender of dentists and complainants, the age of dentists and complainants, dentists' degree, the place of service provision, the type of services provided, the causes of complaints, and the sentences issued to dentists (conviction or non-conviction).

Results: A total of 208 cases were evaluated, and in 67 (32.2%) cases, dentists had been found guilty. Most cases involving convicted dentists were associated with male dentists, female complainants, general dentists, and in-office services. In the cases of convicted dentists, the most common service provided was endodontic treatment and the most common cause of complaint was failed or incomplete treatment.

Conclusion: To reduce the growing number of complaints against dentists, their skills should be improved, especially in endodontic treatment services. It is advisable for general dentists to consider referring patients to specialists either for more skilled treatments or to allow their patients' expectations to be better met.

Keywords: Delivery of health care, Dentists, Iran, Malpractice, Patients

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Introduction

A simple search in each database reveals a large number of studies which have examined the various aspects of complaints against health professionals, including dentists. The quantity of these studies and the geographical distribution of countries in which these studies have been conducted show the importance and prevalence of this problem worldwide. Unfortunately, health professionals involved in complaint cases are affected emotionally and physically, and this is arguably one of the most stressful experiences of their careers (1).

In any society, the review of former complaints allows the possibility of increased familiarity with the characteristics of those complaints; therefore, making possible the elimination of health care system shortcomings to increase health care recipients' satisfaction. To this end, numerous studies in different countries, including Iran, have reviewed past filed complaints (2-11).

Among complaints against health professionals, a significant share is allocated to dentists. In the United States, for instance, approximately 13% of all the reports of the National Practitioner Data Bank (NPDB) were associated with dentists (12). Due to the importance and relatively significant number of complaints against dentists, these complaints have been studied in Iran and many other countries over the past years (2,6,13-20). Of course, to the best of our knowledge, only one previous study has evaluated complaints against dentists working in Mashhad, the second most populous city in Iran, and the available data on these complaints have not been updated for almost 10 years (13).

The aim of the present study was to evaluate complaints against dentists working in Mashhad, Iran during 2012-2017.

Materials and Methods

In this study, all completed dental complaint cases available in the archive of the Mashhad Medical Council within a six-year time period (from 2012 through 2017) were reviewed. For purposes of protecting the rights and identities of individuals involved in these cases, the researchers were provided with the required information based on a checklist and extracted by a staff member of the Mashhad Medical Council. The checklist included variables such as the gender of dentists and complainants, the age of dentists and complainants, dentists' degree (general dentist or dental specialist), the place of service provision (office or clinic), the type of services provided (tooth extraction, maxillofacial surgeries, periodontic treatments, dental implantation, endodontic treatments, tooth filling, prosthodontic treatments, orthodontic treatments, or pediatric dental treatments), the cause of complaints (failed or incomplete treatment, wrong diagnosis, damage to other tissues, high fee, bad infection control, or other causes such as dentists' inappropriate interaction and lack of a medical license), and the sentences issued to dentists (conviction or non-conviction). Complaint cases with unavailable or incomplete information as well as complaint cases originating out of Mashhad were excluded from the study.

Statistical analysis

The data were analysed using SPSS for Windows, version 16 (SPSS Inc., Chicago, IL, USA). The chisquare test was utilized to assess the association between the gender of dentists and complainants, and the sentence issued to dentists. T-test was used to assess the association between the age of dentists and complainants, and the sentence issued to dentists. In all the statistical analyses, the statistical significance level was set at p<0.05.

Ethical approval

This study was approved by the Ethics Committee of School of Dentistry, Mashhad University of Medical Sciences (Approval code: IR.MUMS.DENTISTRY. REC.1398.004).

Results

A total of 208 cases (7.9% of 2628 complaint cases against all health professionals) were evaluated, and in 67 (32.2%) cases, dentists had been found guilty. In 42.3% of all cases and 25.4% of cases with guilty verdicts, complainants were male. The gender of complainants was statistically significantly associated with the conviction of dentists; most of guilty verdict cases were related to female complainants (p=0.001). In 79.8% of all cases and 79.1% of guilty verdict cases, dentists were male. The gender of dentists

had no statistically significant association with the conviction of dentists (p=0.862). As table 1 presents, neither complainants' age (p=0.748) nor dentists' age (p=0.100) was statistically significantly associated with the conviction of dentists as well.

Among all cases, most dental services related to complaints (52.4% of 208 cases) had been provided in clinics, while among cases with convicted dentists, most services (53.7% of 67 cases) had been provided in offices. Among cases with convicted dentists, most cases (88.1%) were associated with general dentists, followed by oral and maxillofacial surgery specialists (6.0%), cosmetic and restorative dentistry specialists (3.0%), endodontists (1.5%) and orthodontists (1.5%), respectively.

Among all cases, tooth extraction was the most common type of received dental services. However, among cases with convicted dentists, the most frequent type of received dental services was endodontic treatment (Figure 1). Figure 2 shows the frequency of the six causes of complaints among all cases, and among cases with convicted dentists. The frequency of the causes of complaints among cases with convicted dentists has been presented in figure

Table 1. Complainants' age (n=184) and dentists' age (n=207); among all cases, cases with convicted dentists, and cases with not convicted dentists

		Complainants' age (Year)			p⁺	Dentists' age (Year)				p
	Mean	SD	Minimum	Maximum		Mean	SD	Minimum	Maximum	
All cases	37.7	13.0	12	72		43.9	10.0	24	69	
Cases with convicted dentists	37.3	13.3	12	67	0.748	45.5	10.5	26	68	0.100
Cases with not convicted dentists	37.9	12.9	13	72		43.1	9.7	24	69	

SD = Standard deviation

* T-test



Figure 1. The frequency of different types of received dental services among all cases (n=208), and among cases with convicted dentists (n=67).





Figure 2. The frequency of the six causes of complaints among all cases (n=208), and among cases with convicted dentists (n=67).



Figure 3. The frequency of the causes of complaints among cases with convicted dentists (n=67), categorized by the type of received dental service.

3, categorized by the type of received dental services.

Discussion

This study aimed to update available information on complaints against dentists working in Mashhad. All completed dental complaint cases available in the archive of the Mashhad Medical Council from 2012 through 2017 were reviewed.

According to our findings, dentists were convicted in a third of the reviewed cases, and most cases with convicted dentists were related to male dentists, female complainants, general dentists, and in-office services. In cases with convicted dentists, the most common service provided was endodontic treatment and the most common cause of complaint was failed or incomplete treatment. The results of this study in combination with results presented by Movahhed *et al* (13) revealed a relatively increasing trend in the annual total number of complaints against dentists working in Mashhad, Iran from 2001 through 2017 (Figure 4).

The results of the present study showed that most complainants were female. Our findings, in this

regard, are in line with the results of some other studies (2,13,14,19). The higher proportion of female complainants may be due to women being more sensitive to their own health and beauty, or due to having more free time to pursue legal action. However, Pukk *et al* in their study, as one of the reasons for the higher proportion of female complainants, also pointed out that medical errors are more common in the treatment of female patients as compared to male patients (21).

In the current study, it was also found that most complaints were associated with male dentists. Our findings, in this regard, are similar to the results of a large number of previous studies (6,13,15-20). The fact that most complaints were related to male dentists might be due to the greater number of male dentists, more professional activity by men, more aggressive work of male dentists, or female dentists' better communication skills (22-24).

In this study, almost half of all complaint cases and the majority of cases with convicted dentists were related to services provided in offices. Some other studies reported that most complaints were attributed



Figure 4. The annual frequency of complaints against dentists working in Mashhad, Iran from 2001 through 2017. [Information related to the years 2001 through 2011 has been extracted from the study of Movahhed *et al* (13).



to private sector services (13,17,18,20). In this regard, the results of the present study are consistent with the results of the mentioned studies since most private sector services are provided in offices. The relation between the majority of guilty cases and in-office services may be due to the fact that dentists may act more aggressively in in-office situations where they feel more independent. Another possibility is that dentists in their own offices prefer not to refer cases to more skilled dentists, but instead attempt to meet all or most of their patients' treatment needs themselves. This study showed that the majority of all complaint cases, as well as the majority of cases with convicted dentists were related to general dentists. In this respect, the results are similar to the results of some previous studies (13,15,17,18). Due to the greater number of general dentists, most oral health services are provided by them which leads to their higher proportion of complaints. But it is also possible that general dentists, despite being less skilled than specialists, tend to perform a wide range of treatments. Based on the results of this study, the three most common dental services related to complaints were tooth extraction, endodontic treatment, and prosthodontic treatment, in respective frequency. It is noteworthy that in many similar previous studies, despite the differences in service categorization, endodontic treatment and prosthodontic treatment were also among the three most common services related to complaints (13,15-20). Examination of the results of the present study showed that the most common cause of complaints regarding both of these treatments was failed or incomplete treatment.

In this study, all completed complaint cases against dentists working in Mashhad over a period of six years (from 2012 through 2017) were reviewed. The selected time period and also the similarity of the study method enabled us to combine our results with those of Movahhed *et al*'s study (13). This combination

provided a more complete picture of the changes in the number of complaints over a 17-year period. A limitation existed as no interviews were held with either complainants or dentists for this study, thus the results were based solely on information recorded in archived cases. Comparison of the results of this study with those of the previous similar studies has also been limited due to differences in the categorization of services and causes of complaints.

Conclusion

According to the results of this study, the involved dentists in almost one third of the reviewed complaint cases had been found guilty, and the majority of them were male general dentists. It can be deduced that to reduce the increasing number of complaints against dentists, their skills should be improved, especially in services such as endodontic and prosthodontic treatment. It is advisable for general dentists to consider referring patients to specialists either for more skilled treatments or to allow their patients' expectations to be better met.

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Conflict of Interest

None.

References

1. Bourne T, Wynants L, Peters M, Van Audenhove C, Timmerman D, Van Calster B, et al. The impact of complaints procedures on the welfare, health and clinical practise of 7926 doctors in the UK: a cross-sectional survey. BMJ Open 2015 Jan 15;5(1):e006687.

2. Laviv A, Barnea E, Tagger Green N, Kadry R, Nassar D, Laviv M, et al. The incidence and nature of malpractice claims against dentists for orthodontic treatment with periodontal damage in Israel during the years 2005-2018-a descriptive study. Int J Environ Res Public Health 2020 Nov 26;17(23):8785.

3. Choi S, Shin S, Lee W, Choi SM, Kang SW. Medicolegal lessons learned from thyroidectomy-related lawsuits: an analysis of judicial precedents in South Korea from 1998 to 2019. Gland Surg 2020 Oct;9(5):1286-97.

4. Kornmehl H, Singh S, Adler BL, Wolf AE, Bochner DA, Armstrong AW. Characteristics of medical liability claims against dermatologists from 1991 through 2015. JAMA Dermatol 2018 Feb 1;154(2):160-6.

5. Hwang CY, Wu CH, Cheng FC, Yen YL, Wu KH. A 12-year analysis of closed medical malpractice claims of the Taiwan civil court: a retrospective study. Medicine (Baltimore) 2018 Mar;97(13):e0237.

6. Thomas LA, Tibble H, Too LS, Hopcraft MS, Bismark MM. Complaints about dental practitioners: an analysis of 6 years of complaints about dentists, dental prosthetists, oral health therapists, dental therapists and dental hygienists in Australia. Aust Dent J 2018 Jun 4;63(3):285-293.

7. Ryan AT, Too LS, Bismark MM. Complaints about chiropractors, osteopaths, and physiotherapists: a retrospective cohort study of health, performance, and conduct concerns. Chiropr Man Therap 2018 Apr 12;26:12.

8. Li H, Wu X, Sun T, Li L, Zhao X, Liu X, et al. Claims, liabilities, injures and compensation payments of medical malpractice litigation cases in China from 1998 to 2011. BMC Health Serv Res 2014 Sep 13;14:390.

9. Birkeland S, Depont Christensen R, Damsbo N, Kragstrup J. Characteristics of complaints resulting in disciplinary actions against Danish GPs. Scand J Prim Health Care 2013 Sep;31(3):153-7.

10. Sönmez MM, Seçkin FM, Sen B, Birgen N, Ertan A, Oztürk I. Adli Tip Kurumu'ndan görüş sorulan ve ortopedi uzmanlik alanına giren tibbi uygulama hatalarının gözden geçirilmesi [A review of malpractice claims concerning orthopedic applications submitted to the Council of Forensic Medicine] Turkish. Acta Orthop Traumatol Turc 2009 Aug-Oct;43(4):351-8.

11. Jafarian A, Parsapour A, Haj-Tarkhani A, Asghari F, Emami Razavi SH, Yalda A. A survey of the complaints entering the medical council organization of Tehran in three time periods: the years ending on 20 march 1992, 20 march 1997 and 20 march 2002. J Med Ethics Hist Med 2009 Jun 2;2:9.

12. Shulman JD, Sutherland JN. Reports to the National Practitioner Data Bank involving dentists, 1990-2004. J Am Dent Assoc. 2006 Apr;137(4):523-8.

13. Movahhed T, Arab HR, Hashemi S, Mohammadzadeh Z. Evaluation of dental complaints received by the Mashhad medical council from 2001 to 2011. Sci J Forensic Med 2016 May 10;22(1):31-7.

14. Ji YD, Peacock ZS, Resnick CM. Characteristics of national malpractice claims in oral and maxillofacial surgery. J Oral Maxillofac Surg 2020 Aug;78(8):1314-8.

15. Makwakwa NL, Motloba PD. Dental malpractice cases in South Africa (2007-2016). South African Dent J 2019 Jul;74(6):310-5.

16. Manca R, Bruti V, Napoletano S, Marinelli E. A 15 years survey for dental malpractice claims in Rome, Italy. J Forensic Leg Med 2018 Aug;58:74-77.

17. Hashemipour MA, Movahedi Pour F, Lotfi S, Gandjalikhan Nassab AH, Rahro M, Memaran Dadgar M. Evaluation of dental malpractice cases in Kerman province (2000-2011). J Forensic Leg Med 2013 Oct;20(7):933-8.

18. Kiani M, Sheikhazadi A. A five-year survey for dental malpractice claims in Tehran, Iran. J Forensic Leg Med 2009 Feb;16(2):76-82.

19. Bjørndal L, Reit C. Endodontic malpractice claims in Denmark 1995-2004. Int Endod J 2008 Dec;41(12):1059-65.

20. Ozdemir MH, Saracoglu A, Ozdemir AU, Ergonen AT. Dental malpractice cases in Turkey during 1991-2000. J Clin Forensic Med 2005 Jun;12(3):137-42.

21. Pukk K, Lundberg J, Penaloza-Pesantes RV, Brommels M, Gaffney FA. Do women simply complain more? National patient injury claims data show gender and age differences. Qual Manag Health Care 2003 Oct-Dec;12(4):225-31.

22. Smith MK, Dundes L. The implications of gender stereotypes for the dentist-patient relationship. J Dent Educ 2008 May;72(5):562-70.

23. Sondell K, Söderfeldt B, Palmqvist S. Dentist-patient communication and patient satisfaction in prosthetic dentistry. Int J Prosthodont 2002 Jan-Feb;15(1):28-37.

24. Bayat F, Vehkalahti MM, Akbarzadeh A, Monajemi F. Varying manpower alters dental health in a developing health care system. Int Dent J. 2022 Jun;72(3):360-5.