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# Original Article

# Dental malpractice lawsuit in the madinah region

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#### ABSTRACT

Background: The number of reports of dental malpractice cases has been increasing in recent years. The purpose of this study was to assess the data and outcomes related to dental malpractice claims in Madina City, Saudi Arabia.

*Methods*: This study conducts a retrospective study of dental malpractice claims in Madina city, Saudi Arabia assessing 97 cases of dental malpractice claims from the year 2016 to 2022.

*Results*: the study showed that the highest percentage of cases (29.9%) were reported guilty in the year 2021. with the highest number of claims (30%) related to the prosthodontic specialty. Most of the cases were against general practitioners (64.9%). Most of the cases (71.1%) lacked signed informed consent.

Conclusion: To decrease the number of dental claims, valuing specialties and obtaining informed consent should be considered by all dentists.

## 1. Introduction

Malpractice can be defined according to Cambridge University as failure to act correctly or legally when doing the job, often causing injury or loss. The term of dental malpractice is used when a dentist violates the recognized norms of professional rules and causes harm to the patient (BAL 2009). In 1970, between 3 and 4 % of all doctors in the United States had been sued; by 1980, that number had risen to 20 %, and by 1990, it had reached 25 % (Sox Jr and Woloshin, 2000). In the US, between 2006 and 2016, 32,723 claims were made against dentists. Every year in Brazil, 7 % of all doctors get sued (Flores and de Oliveira, 2020). The number of lawsuits against doctors rose by roughly 250 % in 2008, according to Brazilian court data (Flores and de Oliveira, 2020).

Both the public and private healthcare systems in Saudi Arabia have grown significantly during the past twenty years. These advancements are the consequence of both the technological boom and the increased expertise and knowledge of healthcare professionals. However, a trend toward more dental malpractice claims has emerged as a result of the population's growing understanding of its rights and obligations regarding to health problems. The number of claims and complaints made against healthcare professionals may have an impact on this.

Because of this, it is necessary to create guidelines and rules that specify what obligations healthcare professionals have to their patients. The Ministry of Health (MOH) created the Regulations of Medical

Practice to raise the standard of healthcare. The duty of receiving malpractice claims and looking into cases of professional negligence that cause morbidity or mortality falls on the Medico-Legal Committee (MLC). To establish a conclusion, these investigations include examining the patient medical file and records as well as speaking with both the plaintiff and the defendant.

Lack of informed consent is one of the causes for which a patient sues a dentist. According to an analysis of malpractice claims, 48 % of the instances lacked informed consent (Lopez-Nicolas et al., 2011). In a different study, it was discovered that 77 % of malpractice claims lacked informed consent, while the remaining cases came with inappropriate consent (Lopez-Nicolas et al., 2007). In examining malpractice claims in Turkey, it was discovered that 25 % of dentists were judged guilty due to a lack of informed consent rather than the treatment they gave (Ozdemir et al., 2005). In Saudi Arabia, only one of the 32 recorded malpractice claims had documented informed consent (Al-Ammar and Guile, 2000).

The Ministry of Health developed the Saudi Informed Consent Guide that can contribute significantly to preserving both the patient's and families' rights, and the practitioners as well as the health care providers (Nassar and Demyati, 2021). Healthcare organizations aim to maintain patient safety and satisfaction. However, the achievement of these goals is considered challenging not only in Saudi Arabia but also in many health organizations around the world. This challenge can be attributed to some extent to the lack of dental malpractice studies in Saudi Arabia.

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In dentistry, dentists may face medico-legal issues; therefore, exploring the causes of dental malpractice may allow dentists to overcome these issues (Almannie et al., 2021). This study is aims to recognize the contributing factors and outcomes of dental malpractice in the Kingdom of Saudi Arabia.

#### 2. Material and methods

This study conducts a retrospective evaluation of dental malpractice claims seen in the MLC of the Ministry of Health in Madina region, Saudi Arabia. The records of 97 cases of dental malpractice claims from January 2016 to August 2022 were evaluated.

The research was approved by the Institutional Review Board in the General Directorate of Health in Madina city, Saudi Arabia under the number IRB-030-2022 which helped in granting access to the data from MLC.

The data was gathered from MLC which includes:

- Demographic data
- Specialty of the defendant
- · Year of litigation
- Trial period in days
- · Final verdict

Indemnity money paid to the plaintiff and money paid as penalty for the government.

The inclusion criteria of the cases were:

- Cases of dental malpractice claims closed between the years of 2016
   to 2022
- · Cases with complete details.

The Exclusion criteria involved:

 Cases with missing information, duplicated cases, or anything other than informed in the inclusion criteria.

All data were coded and analysis using IBM SPSS, Version 25.0 Armonk, NY: IBM Corp.

### 3. Results

A total number of 97 malpractice litigations were retrieved and analyzed, all cases were between 2016 and 2022. According to the court decision, a total number of 27 cases were dismissed, 46 cases were guilty, 18 cases ended in settlement, and 6 cases were not guilty. Table 1.

The average trial period, indemnity and financial penalty paid are shown in Table 2.

Prosthodontic specialty was the most commonly involved specialty with 29 cases, followed by endodontics with 22 cases and orthodontics with 19 cases (Table 3). Saudi practitioners were involved in 5 % of cases, while non-Saudi were involved in 95 % of malpractice claims.

**Table 1**Cases according to court decision and year of decision.

		Court Decision					
		Case Dismissed	Guilty	Settlement	Not Guilty		
Year Of	2016	0	1	1	1	3	
Lawsuit	2017	1	3	1	2	7	
	2018	0	8	1	0	9	
	2019	4	2	3	0	9	
	2020	10	12	7	1	30	
	2021	7	17	5	0	29	
	2022	5	3	0	2	10	
Total		27	46	18	6	97	

Table 2
Trials duration and average money paid by defendant.

Variable	Min	Max	Mean	SD
Trial period in days	60	1095	403.3	221.65
Total Indemnity money paid to the plaintiff (Guilty Decisions)	0	191,000	19,597	35,453
Total Indemnity money paid to the plaintiff (Settlement Decisions)	0	28,880	3787	7096
Amount of financial penalty paid to the government (Guilty)	0	40,000	3152	8224
Amount of financial penalty paid to the government (Settlement)	0	2000	222.22	848.32

**Table 3**Cases according to specialty involved and amount of money paid.

Specialty involved in lawsuit		Payment to plaintiff	Payment to public
Pedodontics	N	3	3
	Mean	3040.00	1000.00
	SD	2691.617	1732.051
	Sum	9120	3000
Endodontics	N	22	22
	Mean	4018.18	318.18
	SD	9861.162	646.335
	Sum	88,400	7000
Maxillofacial surgery	N	1	1
	Mean	10000.00	0.00
	Sum	10,000	0
Restorative Dentistry	N	11	11
	Mean	9321.82	4000.00
	SD	20390.737	11966.620
	Sum	102,540	44,000
Prosthodontics	N	29	30
	Mean	19406.55	1866.67
	SD	36873.904	2459.792
	Sum	562,790	56,000
Orthodontics	N	19	19
	Mean	4260.53	947.37
	SD	9111.388	2344.584
	Sum	80,950	18,000
Implant	N	5	5
	Mean	22410.00	8000.00
	SD	35756.160	17888.544
	Sum	112,050	40,000
Total amount paid		965,850	168,000

According to the qualification of the defendant, a total number of 62 cases were against general practitioners and 35 cases were against specialists (Table 4). General dentists were involved in almost 65 % of all cases, while the rest of cases were against specialists (Table 5).

According to gender of plaintiff, a total number of 43 cases were males, and 54 cases were females (Table 6). Written informed consents were taken in less than 29 % of the cases (Table 7).

## 4. Discussion

Dental malpractice claims in Madina region has not been investigated before, it was included as part of national study which reviewed about 35 cases only. This report reviewed 97 closed cases in MLC in Madina region.

This study demonstrated that defendants were reported guilty in 47 % of cases and settlement in 18.5 %, which can be attributed to dentists' failure to follow the known standards of professional practices (BAL 2009). Similarly, 43 % were found guilty in a study concerning endodontic malpractice claims in Denmark (Bjørndal and Reit, 2008). In addition, two other reports from Brazil reported similar findings (47 % and 44.32 %) (de CASTRO et al., 2015, Zanin et al., 2016). The number of cases has increased from nine cases in 2018 and 2019 to 30 cases in 2020 more than 300 %. This is in agreement with data reported in a national study in Saudi Arabia in 2022 where there was evidence of an

 Table 4

 Qualification of defendant and court decision.

		Case Dismissed	Guilty	Settlement	Not Guilty	Total	Percent
Qualification of defendant	General practitioner	20	29	9	4	62	63.9
	Specialist	7	17	9	2	35	36.1
Total		27	46	18	6	97	100

**Table 5**Cases according to the specialty of the defendant and court decision.

		Court Decision					
		Dismissed	Guilty	Settlement	Not Guilty	Total	Percent
Specialty of defendant	General	20	29	10	4	63	64.9
	Pedodontics	1	0	0	0	1	1
	Endodontics	0	1	0	0	1	1
	Maxillofacial	1	2	2	0	5	5.2
	Restorative	0	1	1	0	2	2.1
	Prosthodontics	0	2	1	0	3	3.1
	Orthodontics	4	9	4	2	19	19.6
	Periodontics	1	0	0	0	1	1
	Oral surgery	0	2	0	0	2	2.1
Total		27	46	18	6	97	100

**Table 6**Cases according to gender of plaintiff and court decision.

	Court Decision					
	Case Dismissed	Guilty	Settlement	Not Guilty	Total	
Male	10	43	10	3	43	44.3
Female	17	54	8	3	54	55.7
Total	27	97	18	6	97	100

**Table 7**Cases according to presence of informed consent and court decision.z.

	Court Decision	Total			
	Case Dismissed	Guilty	Settlement	Not Guilty	
Informed Consent Taken	11	13	4	0	28
No Consent Taken Total	16 27	33 46	14 18	6 6	69 97

increase from 147 cases in 2018 to 282 cases in 2020 (Alsaeed et al., 2022). This could be due to increased patient awareness about their rights along with readiness and accessibility of the complaints in the health system in Saudi Arabia recently.

In addition, it was found that the majority of cases were against general practitioners with a percentage of 64.9 %, in agreement with previous national study in 2022 and (Alsaeed et al., 2022) a study in Riyadh region 2021 (Aldahmashi et al., 2021) where it was found that 71.9 % and 78.3 % respectively of the filed complaints were against general practitioner. Which adds the value and importance of referring the advanced cases to specialists to avoid such a claim, in addition, the lack of clear scope of procedures general dentist is entitled to perform. While, the specialty which is most frequently implicated was prosthodontics with a percentage of approximately 31 %. Similarly, prosthodontics and implant dentistry were associated with the most frequent claims in other studies (Kiani and Sheikhazadi, 2009, Wu et al., 2022), (Melani et al., 2010, Lima et al., 2012, Rosa et al., 2012, Terada et al., 2014).

In contrast to Castro et al. (de CASTRO et al., 2015) who found endodontics as the most involved specialty, and Fernandes and Junior (FERNANDES and DARUGE JÚNIOR, 2012) who found Oral and

maxillofacial surgery, the most involved specialty.

One of the major factors affecting the treatment outcome is the dentist's experience (Calla and Muñoz, 2021). This study found that most of the dentists involved in the complaints had more than ten years of experience which is against expectations of finding limited experience as a contributing factor. This can be attributed to the over-confidence that can lead experienced dentists to work with old treatment approaches or with poor assessment, while non-experienced dentists were found to work with caution (Wu et al., 2022).

Although it is stated obviously in the Law of Practicing Healthcare Professions in Saudi Arabia that no medical intervention can be performed without the patient's consent, our analysis found that only 28.9 % of the cases included consent form. This is in a agreement of thee National study, where consent form documentation was less than 40 % of cases (Alsaeed et al., 2022). In contrast, only 8 % of cases lacked informed consents in previous report in Riyadh (Aldahmashi et al., 2021).

The consent form is thought to significantly contribute to the patient-practitioner relationship by providing a clear explanation of the patient's treatment plan, and any difficulties, risks, complications, and making sure of understanding the whole procedure, as well as their autonomy and approval. However, if this consistency is lost, it increases the probability for people to file complaints (Nassar et al., 2021, Wu et al., 2022). It is significant to note that in the few situations when the patient signed the consent form, it played a role in demonstrating innocence and resulting in a favorable judgment for the dentist (Wu et al., 2022).

The mean amount of money paid to the plaintiff was 19,597 SR, which is almost half of what has been reported by Aldahmashi et al (Aldahmashi et al., 2021) who reported an average of 36,623 SR and less than 26,297 SR reported in previous national study 2022 (Alsaeed et al., 2022).

The highest amount of money paid was in cases involving implant specialty, this is expected because of the high-cost nature of implant therapy. In contrast to Melani et al. who found the highest compensation in oral maxillofacial surgery specialty (Melani et al., 2010).

The average trial period was 403 days, which was more than four times the trial period reported by S. Alsaeed et al., yet the Alsaeed study included all regions of the Kingdom of Saudi Arabia, where some region's mean trial time was as low as 16 days. However, waiting for more than 400 days in a dental malpractice claim is not convenient either to the defendant or the plaintiff.

#### 5. Conclusion

There is an increasing trend of dental malpractice claims in Madina city. Most of the cases were against general practitioners with a percentage of 64.9 %. About 55.7 % of the plaintiffs were females. Dental malpractice cases require more than a year -in average- before a decision is taken. Finally, most of the cases did not sign a consent form with a percentage of 71.1 % and this should emphasis on the importance of obtaining informed consent before any procedure.

## CRediT authorship contribution statement

**Ahmad A. Al-Fraidi:** Conceptualization, Methodology, Writing – review & editing, Formal analysis. **Norah Ayman Shuqayr:** Methodology, Writing – review & editing, Data curation. **Yahya A. Alogaibi:** Writing – original draft, Writing – review & editing.

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