Original Article

Indian Dental Malpractice Claims and Lawsuits: A Medico-Legal Analysis

Sunil Venkata Naga Vadde¹, Madhusudan Reddy¹, Harshavardhan Jois¹, Mrunalini Koneru², Prathima Vedati²

¹Department of Oral Pathology, ²Department of Public Health Dentistry, Army College of Dental Sciences (ACDS), KNRUHS, Telangana, India

Received	:28-Nov-2023
Revised	:21-Apr-2024
Accepted	:25-Apr-2024
Published	:27-Aug-2024

Background and Aim: The law of the land assumes that a dentist will always use credible skill, care, and caution in the care of patients. Failing to do something that one is supposed to do (act of omission) or doing something that one is not supposed to do (act of commission) falls under the purview of medical jurisprudence. Each patient is legally entitled to get quality medical care from a physician; failure to such trust is an actionable offense and grievances can be challenged in consumer redressal forums. This analytical study was aimed to study the reasons for dental negligence cases that sought judicial assistance in consumer courts in terms of monetary benefits and also to study the delay in settlements. Materials and Methods: Archival data of final court-pronounced judgment cases on dental negligence between 2018 and 2022 (i.e., 5 years) were gathered from customer forum websites (https://confonet.nic.in, http://indiankanoon.org/doc, and www.casemine.com). A total of 56 proven dental allegation cases were retrieved. In each verdict case, the allegation against dentist by the plaintiff was recorded, and the response to the complaint by the defendant was studied and analyzed. The year of filing the case and date of judgment, basis of compensation awarded, delay in judgment and role of expert evidence appointed by the court assessed. **Results:** Misdemeanor by serious negligence: 3, slight negligence: 8, negligent injuries: 35, felony of injuries by serious negligence: 10. Conclusion: Because dentistry involves making decisions in unclear scenarios that affect patient care, there is an inherent danger of malpractice litigation. Awareness of medico-legal issues and professional indemnity insurance coverage for the dentist to safeguard himself from negligence, continuous medico-legal training and documentation of records, and adherence to clinical standards for procedures should be emphasized as prior motives to enhance the standard of care, and a basic awareness of how Indian courts resolve disputes would help dentists plan their professional indemnity insurance and operate their profession properly.

Keywords: Accountability, compensation, consumer court, duty breach, expert evidence, negligence, plaintiff

INTRODUCTION

ational Consumer's Rights Day" is observed on December 24th to raise awareness about consumer rights. The Consumer Protection Act of 1986 empowers consumers and safeguards them against market abuse and social injustice. The Supreme

Access this article online		
Quick Response Code:		
	Website: https://journals.lww.com/jpcd	
	DOI: 10.4103/jispcd.jispcd_193_23	

Court declared that doctors are likewise covered by this act. $^{[1,2]}$

Address for correspondence: Dr. Vadde Venkata Naga Sunil, H. No: 1-4-212/71, Greenpark Enclave, Kapra, Sainikpuri, ECIL Post, Secunderabad, Telangana 500062, India. E-mail: vvnssunil@gmail.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Vadde SVN, Reddy M, Jois H, Koneru M, Vedati P. Indian dental malpractice claims and lawsuits: A medico-legal analysis. J Int Soc Prevent Communit Dent 2024;14:295-301.

295

The dental professional renders "service" to his patients with an understanding to provide care to their patients, dentists must meet particular credentials and demonstrate sensitivity. If a patient is dissatisfied, they may sue for "failure to provide service" under the Consumer Protection Act.^[3–5] Dentists have an ethical responsibility to serve humanity. Unfortunately, some prioritize profit over patients. This unhealthy relationship between doctor and patient leads to the patient feeling helpless and exploited due to their anxiety and uncertainty.^[6,7] Medical professionals are not immune to negligence in contract or tort under Indian legal ethics. Medical ethics has to guard against the misuse of a doctor's power.^[8,9]

Oral health is a basic component of the general health of the individual, and due to modern lifestyle changes, people are more prone to a number of oral health diseases.^[10,11] Despite increased per capita expenditure on the general health of the population by government-supported and fully financed health insurance and public health policy under the flagship scheme of Ayushman Bharat, the Pradhan Mantri Jan Arogya Yojana (PM-JAY), which provides cashless access to health care services across India but does not cover general dental diseases, and even individual private insurance companies offering dental insurance schemes with high premium costs for limited dental treatments.^[12,13] All these harsh ground realities suggest that oral health is still a neglected facet because of lack of dental insurance coverage plans and government support for all treatments to individuals, families, and groups, and escalating trend of inflation and high treatment costs, the utilization of oral care services becomes still a common burden and exploitation by private practioners.^[14,15] This novel study intends to analyze the epidemiology of dental malpractice and hazardous practices used across India.

OBJECTIVES

To study the reasons for dental negligence cases that sought judicial assistance in consumer courts in terms of monetary benefits and also to study the delay in settlements.

MATERIALS AND METHODS

DATA COLLECTION

296

A total of 56 cases were retrieved from archival data of judgment records on dental negligence from the years 2018 to 2022. Judgments were accessed from the open consumer forum websites https://confonet.nic.in, http://indiankanoon.org/doc, and www.casemine.com (by using the keyword "Dental Negligence" in the text phrase search box)^[8,16-18] The following parameters were analyzed:

- 1. The year the lawsuit began^[19-22]
- 2. Type of court
- 3. Branches of Dentistry
- 4. Reason for the allegation
- 5. What kind of health facility offers dental care?
- 6. If an expert has been designated or not^[23]
- 7. The witness's area of expertise or specialization^[23]
- 8. The doctor's expert opinion's impact on the case's outcome^[24,25]
- 9. Amount of compensation demanded^[24,25]
- 10. Compensation amounts sanctioned
- 11. Basis for the compensation amount awarded to the plaintiff
- 12. Number of days delayed between treatment and judgment pronounced^[26]

BASIS FOR CALCULATING COMPENSATION^[24]

Compensation under common law for medical negligence includes financial loss, future medical expenses, and pain and suffering.

Formula = 70 (age) × annual income \pm 30% for inflation - 1/3 for expenses

STATISTICAL ANALYSIS

SPSS was used for statistical analysis, definitive variables were analyzed using the Chi-square test, and continuous variables by using t test. The study protocol was approved by the Institutional Ethics Committee of the Army College of Dental Sciences, Secunderabad.

Categorical variables	Continuous variables
Compensation	Dentist dissatisfaction
Litigation status	Mistrust
Financial incentive	Upset with health
Expert opinion	Delay

INCLUSION CRITERIA

- Case law on dentistry with a 5-year timeline (2018–2022)
- Cases involving inquiry and legal counsel opinion
- All dental practitioners in India

EXCLUSION CRITERIA

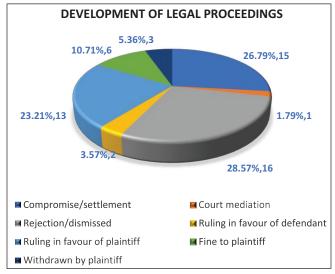
- Road traffic accident cases
- Unlicensed practice cases
- Nondental complaints
- Government/NGO institutions providing free services are excluded
- Ongoing cases excluded

RESULTS

DISCUSSION

Malpractice claims can cause financial and emotional distress for both dentists and patients.^[27] The Dental Council of India regulates ethical dentistry in India, which was founded under the Dentist Act of 1948.^[3,8,11] Utilization and access to dental services for dental problems are delivered in India by the government/nongovernment, mostly by private establishments.^[28] Health is the greatest of all possessions reflecting the age-old proverb, "If health is lost everything is lost." Everybody shall have the right to life and health. If anybody is deprived of the enjoyment of his health, then he can go to the court of law for the enforcement of his right. A patient should always obtain all the benefits for his health and prosperity, which he deserves based on humanity, law, and ethics.^[10] Patients had to spend out-of-pocket expenditure for dental problems fixed and they were forced to "pay or suffer."[29] This societal issue deteriorates the patientdentist interaction and as per the doctrine of legitimate expectation, the standard of care should be high for a dentist, but if breached, it would contribute materially to mental agony, physical pain and suffering, and emotional and economic loss to the patient. This disturbing trend of disputes over dental negligence and medico-legal claims has been raising.^[11,30] India passed the COPRA, a comprehensive law, in 1986 with the goal of advancing and safeguarding consumer interests. In order to settle conflicts, consumer councils have been established at the district, state, and federal levels. It encompasses six distinct consumer rights [Figures 1–5].^[31-33]

In the present study, we gathered and analyzed data on legal suits regarding dental malpractice cases in





India from the years 2018 to 2022. There were a total of 56 cases retrieved from the archival data of lawsuit cases against dentists, indicating rising awareness and the tendency of patients to claim legal rights. Based on regional registration, this study reveals that state consumer courts handled the bulk of cases (N = 30), and private practitioners are involved more (N = 45), indicating that the urban population is exploited more [Table 1]. However, it must be noted that most government institutes have an internal public grievance redressal system for patient concerns and problems, but cases have reached criminal courts (N = 6). Our study found that the specialties mostly involved were oral surgery (N = 17) and endodontics (N = 14)[Figure 2]. Studies show that prosthetics have high claims, according to Kiani and Azadi^[34] Wu et al.^[35] found implant dentistry-related litigation at 37%, and oral surgery at 25%. Makwakwa et al.[36] found maxillofacial surgery at 27.3%, endodontics at 22.7%, and prosthetics at 22.7%. Fernandez^[37] found oral and maxillofacial surgery at 39.52%, dental implants at 16.94%, and orthodontics at 12.9% in Costa Rica. Rovida et al.[38] found oral and maxillofacial surgery at 42%, while Montagna et al.[39] found prosthetics at 70% for failures. According to Moles et al., [40] 28% of

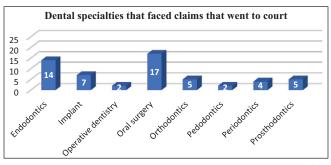
Table 1: Sample characterist	ics
Distribution of cases year-wise	N
2018	13
2019	10
2020	11
2021	8
2022	14
Total	56
Type of institution	
Public	6
Private	45
University/college	5
Total	56
Geographical distribution of courts	
District	16
State	30
National	10
Total	56
Major specialties involved	
Implant	7
Oral surgery	17
Pedodontics	2
Endodontics	14
Prosthodontics	5
Operative dentistry	2
Periodontics	2 4 5
Orthodontics	5
Total	56

complaints were related to oral surgery, and 24% to restorative procedures.

When the defendant was found guilty in the trials examined for this study, the plaintiff was typically awarded compensation. With a maximum of Rs. 500,000 and a minimum of Rs. 50,000, the average compensation paid by the defendant to the plaintiff for oral surgery and endodontic cases was substantial [Table 2]. Comparably, an Indian study found that the average compensation was $93,535.07 \pm 139,011.99$ —Thavarajah *et al.*^[8]

The study's claims, as shown in Table 3, were based on dental neglect cases (N = 21). The patients in these

Table 2: Compensation amount awarded			
Compensation amount (in rupees)			
Compensation in settlement cases	Mean	263000.00	
compensation in settement cases	Standard dev.	219305.72	
	Median	150000.00	
	Minimum	50000.00	
	Maximum	500000.00	
Verdict in favor of plaintiff cases	Mean	143300.00	
	Standard dev.	160333.87	
	Median	64000.00	
	Minimum	22500.00	
	Maximum	400000.00	





298

circumstances, in contrast to Melani *et al.*,^[41] frequently took legal action to recover money for dental damages. According to the report, over 29% of the claims that were examined resulted from patients undergoing treatments that they weren't comfortable with because

Table 3: Rationale for lawsuits and court decisions		
Preprocedural allegation	N	
Incorrect or delay in diagnosis	8	
Improper treatment plan	7	
Lack of informed consent	12	
Improper equipment setting	2	
Negligence	21	
Nonaccompaniment of family	5	
Patient fault or treatment refusal	3	
Failure to involve a specialist	4	
Failure to disclose	3	
Intraprocedural allegation		
Broken instrument/concealing	4	
Hypoxia during therapy	-	
Hammering caused a bone injury	2	
Sodium hypochlorite irritation	9	
Excessive occlusal adjustment	1	
Injury to anatomy	3	
Improper local anesthesia	6	
Tooth avulsion during therapy	2	
Wrong tooth extraction	6	
Pain	14	
Postprocedural allegation		
Bleeding	4	
Improper medication	2	
Improper referral	3	
Infections	4	
Paresthesia	1	
Cancer due to extraction	1	
Unnecessary procedure	7	
Warranty/not replacing	3	
Wrong procedure/outcome	15	
Lack of qualifications	16	
Refusal to help	5	
Prescription error/unwanted drug effects	2	

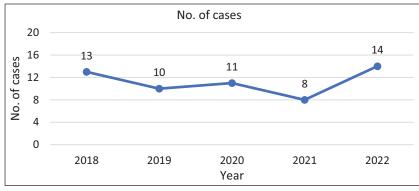
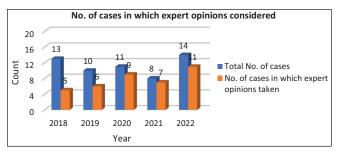


Figure 3: Number of specialties involving dental misconduct brought against dentists^[48]

they were suspicious or unsatisfied, which eventually broke confidence [Table 4].

As depicted in Figure 4, our analysis illustrates the exponential rise in the number of technical and scientific reviewers appointed by consumer courts. The results of expert witnesses Zanini *et al.*^[42] (84.2%) and Montagna *et al.*^[39] (73.1%) are consistent with this tendency. According to our analysis, consumer courts' rulings throughout litigation revealed that, in 26.79% of cases, the defendants reached a compromise, and in 28.57% of cases, the courts dismissed the case. Research by Pérez *et al.*^[25] found that 89% of criminal proceedings ended with an acquittal. However, in a similar study conducted in the Riyadh region by Aldahmashi *et al.*^[43] the outcomes showed a ruling in

Table 4: Type of conviction		
Type of conviction	No. of cases	
Misdemeanor by serious negligence	3	
Misdemeanor by slight negligence	8	
Impersonation	0	
Negligent injuries	35	
Felony of injuries by serious negligence	10	





favor of defendant 12.6%, a ruling in favor of plaintiff 54.3%, a case dismissed of 9.9%, a settlement 20.5%, and a withdrawal by plaintiff 2.6%. Similar to a study by Pérez *et al.*,^[25] which found that it takes an average of 4.38 years from the date of the lawsuit event to resolve this type of lawsuit, In contrast, the average waiting time for the verdict in this study was 4 years.^[26] On the contrary, a study done by Alsaeed *et al.*^[4] in Saudi Arabia found that it took less than 6 months for the disposal of court-trail judgments.

The Indian Supreme Court has established several standards for paying damages for medical negligence, and the reasons were loss of income, medical costs incurred till the date of judgment, future medical costs, pain and suffering, cost of litigation, inflation and interest, and loss of companionship, care, and protection of a spouse due to the medical negligence,^[24,44] whereas in a study by Delduque *et al.*,^[45] the reasons for awarding compensation were moral, material loss, aesthetic, and death due to medical negligence.

CONCLUSION

This study is devoted to all the victims of medical malpractice, whose agony inspired us to begin this endeavor, and will increase awareness of medical malpractice and improve dental care in India. Subpar care and discontent with the treatment's outcome are the two most common errors in dental procedures. To achieve this, solutions must be developed at different levels, including the government, institutions, and individuals. Ethical dentistry based on scientific evidence can minimize risks and benefit patients. Improving India's healthcare system requires more political will, human resources, and investment.

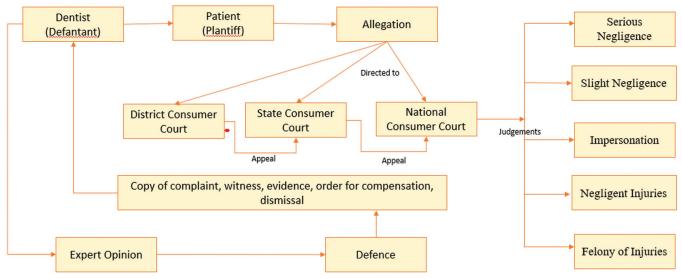


Figure 5: Redressal mechanism for handling lawsuits in India^[49,50]

FUTURE RECOMMENDATIONS

There is a need for the inclusion of topics related to professional liability and dental negligence in the curriculum of undergraduate students, and the importance of professional indemnity insurance coverage to protect dentists should be thought. The government, in collaboration with the Dental Council of India and national insurance companies, should initiate and frame a policy for dental insurance coverage for all dental treatments across India.^[27,36,46]

LIMITATIONS

- 1. Insufficient medical understanding of the legal system while rendering decisions.
- 2. These situations are frequently emotive, and the parties to these disagreements have larger needs and objectives that the existing system ignores.
- 3. Thisstudycould not account for missing confounders, such as occupational and psychological predictors of medical misconduct among dentists in India.

TIPS TO MINIMIZE PROFESSIONAL LIABILITY CLAIMS

The practicing dentists should assess the risk, understand patient needs, and explain the pros and cons of the treatment involved with patient consent, follow strict standard clinical norms in performing the procedure, and document it in a medical record.^[22,47]

ACKNOWLEDGEMENT

The authors express their gratitude to NALSAR University of Law, Hyderabad, for their valuable contributions and support throughout this work.

FINANCIAL SUPPORT AND SPONSORSHIP

Nil.

CONFLICTS OF INTEREST

There are no conflicts of interest.

AUTHOR CONTRIBUTIONS

IEC/122/2023).

SVNV: Conceptualization, design, data acquisition, analysis, statistical analysis, manuscript preparation, editing, and review. MR: Intellectual content definition, literature search, data analysis, manuscript preparation, editing, and review. VP: Literature search, data analysis, editing. MK: Data acquisition, analysis. HJ: Statistical analysis, manuscript preparation, editing, and review.

ETHICAL POLICY AND INSTITUTIONAL REVIEW BOARD STATEMENT Approved (IEC application number: ACDS/

PATIENT DECLARATION OF CONSENT

Not applicable.

DATA AVAILABILITY STATEMENT

All data generated or analyzed in this study are included in the paper. The additional data for this study are available on request from SVNV at vvnssunil@gmail. com.

REFERENCES

- 1. Pandit MS, Pandit S. Medical negligence: Coverage of the profession, duties, ethics, case law, and enlightened defense—A legal perspective. Indian J Urol 2009;25:372-8.
- 2. Gokhale S. Docs in the dock consumer protection act through the ages. Med J Armed Forces India 1998;54:343-6.
- 3. Seshappa KN, Rangaswamy S. Death in dental clinic: Indian scenario. J Forensic Dent Sci 2016;8:61-6.
- Alsaeed S, Aljarallah S, Alarjani A, Alghunaim G, Alanizy A. Dental malpractice lawsuit cases in Saudi Arabia: A national study. Saudi Dent J 2022;34:763-71.
- De Sousa SP, Borges BS, Machado ALR, Matteussi GT, Pinto PHV, de Oliveira LDB, *et al.* Dental malpractice litigance in the city of São Paulo (SP), Brazil. Brazilian J Oral Sci 2022;21:1-12.
- Abomalik AM, Alsanea JA, Alkadhi OH. A retrospective assessment of the dental malpractice cases filed in Riyadh from 2009-2015. J Family Med Prim Care 2022;11:2729-34.
- Ivan DM, Carmen Silvia Molleis GM. Medical errors, medical negligence and defensive medicine: A narrative review. Clinics 2022;77:100053.
- Thavarajah R, Saranya V, Priya B. The Indian dental litigation landscape: An analysis of judgments on dental negligence claims in Indian Consumer Redressal Forums. J Forensic Leg Med 2019;68:101863.
- 9. Acharya A, Savitha J, Nadagoudar S. Professional negligence in dental practice: Potential for civil and criminal liability in India. J Forensic Dent Sci 2009;1:2.
- 10. Sridharan G, Jagadish P. Standard of care in dentistry. J Orofac Sci 2012;4:100.
- 11. Siwach P, Pawar VJ, Thakur A, Shaikh F. Havoc of dental quacks in a district in India: A case series. Indian J Dent Res 2020;31:323-5.
- 12. Rubin JB, Bishop TF. Characteristics of paid malpractice claims settled in and out of court in the USA: A retrospective analysis. BMJ Open 2013;3:e002985.
- Biswas S, Biswas S, Awal SS, Goyal H. Malpractice and lawsuits in radiology: What the radiologist should know. Egypt J Radiol Nucl Med 2023;54:19.
- 14. Price K. Towards a history of medical negligence. Lancet 2010;375:192-3.
- 15. Roy P. To err is human, negligence is sin. Med J Armed Forces India 2001;57:326-8.
- Castro ACC de, Franco A, Silva RF, Portilho CDM, Oliveira HCM de. Prevalence and content of legal suits founded on dental malpractice in the courts of midwest Brazil. Rev Bras Odontol Leg 2015;2:46-52.
- 17. Bayuo J, Koduah AO. Pattern and outcomes of medical malpractice cases in Ghana: A systematic content analysis. Ghana Med J 2022;56:322-30.
- Yadav M, Rastogi P. A study of medical negligence cases decided by the district consumer courts of Delhi. J Indian Acad Foren Med 2015;37:50-5.

- Requena Calla S, Alvarado Muñoz E. Professional liability: Assessment of court sentences for lawsuits against dentists in Peru. J Forensic Odontostomatol 2021;2:15-20.
- Hamasaki T, Hagihara A. Dentists' legal liability and duty of explanation in dental malpractice litigation in Japan. Int Dent J 2021;71:300-8.
- Tripathi R, Ezaldein HH, Rajkumar K, Bordeaux JS, Scott JF. Characteristics of state and federal malpractice litigation of medical liability claims for keratinocyte carcinoma, 1968 to 2018. JAMA Dermatol 2019;155:812-8.
- Mudda V, Awati A. Professional liability in medical practice: A 20 years retrospective study at District Consumers' forum Gulbarga (1991-2011). J Dr NTR Univ Health Sci 2014;3:15.
- AlQahtani S, Bagić I, Manica S, Untoro E, Rosie J, Nuzzolese E. Under the lens: Dental expert witnesses in Brazil, Croatia, Indonesia, Italy, Saudi Arabia, and the United Kingdom. J Forensic Dent Sci 2018;10:8.
- 24. Chandra MS, Math SB. Progress in Medicine: Compensation and medical negligence in India: Does the system need a quick fix or an overhaul? Ann Indian Acad Neurol 2016;19:S21-7.
- Perea-Pérez B, Santiago-Sáez A, Labajo-González ME, Albarrán-Juan ME. Professional liability in oral surgery: Legal and medical study of 63 court sentences. Med Oral Patol Oral Cir Bucal 2011;16:e526-31.
- Espanola R, Legal DM, Espinal A, Fari AV. Medical professional liability claims in Barcelona (2004-2009). Medico-legal analysis. Revista Espanola de Medicina Legal 2020;46:56-65.
- 27. Jasuma J. Rai RVA. Dental negligence and its liabilities in a Nutshell. Indian J Dent Sci 2014;5:84-8.
- Raveesh BN, Nayak RB, Kumbar SF. Preventing medicolegal issues in clinical practice. Ann Indian Acad Neurol 2016;19:S15-20.
- Buttigieg GG, Micallef-Stafrace K. Labour ward negligence. Med Leg J 2021;89:34-6.
- Madhavan S, Haifa B. Dental aberrations: A short review. Indian J Dent Sci 2021;13:215-7.
- Vashist A, Parhar S, Gambhir RS, Sohi RK, Talwar PP. Legal modalities in dental patient management and professional misconduct. SRM J Res Dent Sci 2014;5:91-6.
- 32. Maiti R, Umashankar G. Legal implications of dental practice in India: A critical review of court cases in India. J Oral Health Commun Dent 2022;15:152-5.
- Rao SVJ. Medical negligence liability under the consumer protection act: A review of judicial perspective. Indian J Urol 2009;25:361-71.
- 34. Kiani M, Sheikh Azadi A. A five-year survey for dental malpractice claims in Tehran, Iran. J Forensic Leg Med 2009;16:76-82.
- Wu KJ, Chen Y-W, Chou C-C, Tseng C-F, Su F-Y, Kuo MYP. Court decisions in criminal proceedings for dental malpractice in Taiwan. J Formos Med Assoc 2022;121:903-11.

- Makwakwa N, Motloba P. Dental malpractice cases in South Africa (2007-2016). South African Dent J 2019;74:310-5.
- Fernandez JM. Dental malpractice lawsuits in Costa Rica: Analysis of 124 cases in the period 2015-2020. Revista Medicina Legal De Costa Rica 2021;38:98-104.
- Rovida TAS, Dias I de A, Garbin CAS, Garbin AJI. Evaluation of injury cases for dental intervention described in legal dentistry reports. Int J Odontostomat 2015;9:533-9.
- Montagna F, Manfredini D, Nuzzolese E. Professional liability and structure of litigation in dentistry. Minerva Stomatol 2008;57:349-54, 354.
- Moles DR, Simper RD, Bedi R. Dental negligence: A study of cases assessed at one specialised advisory practice. Br Dent J 1998;184:130-3.
- 41. Melani RFH, Oliveira RN, Tedeshi-Oliveira SV, Juhás R. Legal devices and arguments mostly used in civil lawsuits: Casuistry analysis in Dentistry. RPG Rev Pós-Grad 2010;17:46-53.
- 42. Zanin AA, Strapsson RAP, Melani RFH. Jurisprudential study: Evidences in dental civil liability lawsuit. Rev Assoc Paul Cir Dent 2015;69:119-27.
- 43. Aldahmashi AS, Alqurashi MA, Al-Hanawi MK. Causes and outcomes of dental malpractice litigation in the Riyadh region of the Kingdom of Saudi Arabia. Saudi J Health Sys Res 2021;1:108-14.
- 44. Dahlawi S, Menezes RG, Khan MA, Waris A, Saifullah, Naseer MM. Medical negligence in healthcare organizations and its impact on patient safety and public health: A bibliometric study. F1000Research 2021;10:1-15.
- 45. Delduque MC, Montagner M, Alves SMC, Montagner MI, Mascarenhas G. Medical error in the courts: An analysis of the decisions of the Court of Justice of the Brazilian Federal District. Saude e Soc 2022;31:1-8.
- 46. Ashwin PS, Suresh T. Jurisprudence for dental practice. Karnataka State Dent J 2016;35:7-11.
- 47. Khangwal M, Rahman H, Solanki R, Goyal R. Inadvertent pulmonary aspiration of endodontic hand instrument— procedural negligence and litigation: Case report. Saudi Endod J 2021;11:412-7.
- 48. Laviv A, Barnea E, Green NT, 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;17:1-8.
- 49. Lim LT, Chen W, Lew TWK, Tan JMS, Chang SK, Lee DZW, *et al.* Medico-legal dispute resolution: Experience of a tertiary-care hospital in Singapore. PLoS One 2022;17:e0276124-13.
- 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;14:1-9.