Dental malpractice and its liabilities: Ethical and legal considerations every dentist should know

Johan Hartshorne[1] and Andre van Zyl[2]

Executive Summary

Rationale

Dental malpractice claims are extremely expensive, emotionally stressful and time-consuming. Understanding the ethical and legal concepts related to dental malpractice and negligence, common causes of malpractice, application of ethical decision-making and risk management principles is important. It will better equip dental practitioners to avoid ethical minefields, malpractice claims and dental litigation.

Key points

- Patients rely on trust, their dentist's expertise and a professional diagnosis, to assess their treatment needs.
- Maintain caution, skill, and prudence at all time.
- Clinical decision-making should be based on the fundamental ethical questions: (i) what is in the patients best interest; (ii) will it do harm; (iii) have I informed the patient appropriately; and (iv) is it fair to the patient?
- The over-riding criteria for standard of care – is it in the best interest of the patient?
- The treatment recommended should be safe, predictable, cost-effective, respectful of patient preferences, aimed at preserving normal tissue and function and based upon current scientific evidence.
- Treatment should always address the patient's main complaint.
- Applying ethical decision-making and good risk management protocols will not only reduce risk exposure, patient dissatisfaction, avoid malpractice claims and litigation, but will also improve the standard of patient care.
- Communicate with passion and compassion.

Essential practice implications

- The standard of care applies to all dental practitioners and specialists.
- Never ignore patient expectations and never raise unrealistic expectations.
- Note the patients' main complaint in the file.
- Always be on the alert for risk factors.
- Provide the patient with a written treatment plan and cost assessment.
- Obtain the patients' written informed consent before starting treatment.
- Recall and maintenance care is of critical importance, especially with periodontitis patients, implant dentistry and restorative rehabilitations.
- Deal immediately and appropriately with dissatisfied patients.

[1] Johan Hartshorne
B.Sc., B.Ch.D., M.Ch.D., M.P.A., Ph.D., (Stell), FFPH.RCP (UK)
General Dental Practitioner,
Intercare Medical and Dental Centre,
Tyger Valley, Bellville, 7530
South Africa
Email: jhartshorne@kanonberg.co.za

[2] Andre van Zyl
B.Ch.D., M.Ch.D. (Stell)
Specialist in Oral Medicine and Periodontics
Honorary Professor: Department of Oral Medicine and Periodontology
University of Witwatersrand
Johannesburg
Private practice: 9 Colledge Road, Hermanus
Email: info@andrevanzyl.co.za

Introduction

The dental profession holds a special trust relationship with its patients. To uphold this mutual trust the dental profession makes a commitment to the patient that they will adhere to a high ethical standard of care and conduct.[1] The relationship between dentists and patients has changed in recent times and some of the major causes are: [2]

1. An increase in patient awareness of their rights.
2. High expectations and demands where aesthetic procedures are involved.
3. Competition between practitioners in a highly competitive market.
4. A change in the patient-dentist relationship from a personal/professional relationship to a more business/ commercial relationship.
5. Increase in scientific and technological development creating a society founded on capitalism and consumption.

The dental profession has in recent times come under increasing attack by disgruntled patients dissatisfied with their treatment.[3] Dissatisfaction between patient and dentist can often be resolved or managed properly and early, but sometimes patients turn to courts to get matters resolved. Such litigation cases against a dentist can result in severe consequences frequently causing loss of income, loss of reputation, harassment, mental agony, stress, sleeplessness, and embarrassment in society.[3] Furthermore, dental malpractice claims are expensive, emotionally stressful and time-consuming. It is therefore in the patient's as well as the clinicians' best interest to prevent dental malpractice claims. To avoid malpractice claims, dentists should know the rules/ regulations guiding the profession, the law and litigation pertaining to their practice and standard of care practice protocols.

Prevalence/ incidence of dental malpractice

Not many descriptive studies are available describing the prevalence, causes, impact and outcomes of dental malpractice claims. A recent study analysing malpractice cases finalized between 2007 and 2016 in South Africa, showed that most cases constituted fraud (66.7%), clinical malpractice (23.2%) and professional misconduct (10.1%).[4] Clinical malpractice complaints mainly involved oral surgery (27.3%), endodontic therapy (22.7%), prosthodontic therapy ((22.7%), operative dentistry (9.1%), periodontics (6.8%) and orthodontics (4.5%).[4]

A survey of dental malpractice claims in Rome, Italy showed that most litigious activities were related to prosthetic, dental implant and endodontic procedures.[5] Most insured convicted dentists (52.3%) were not fully covered by their insurance due to the presence of unmet contract clauses. An analysis of malpractice claims in implant dentistry in Italy from Insurance Company Technical Reports between 2006 to 2010 revealed that most of the surgical errors were committed during implant insertion (82.6%). Halve of these cases involved surgical errors due to inadequate treatment planning and execution, resulting in damage of the inferior alveolar nerve (32.2%), lingual nerve (2.5%), invasion of the maxillary sinus (9.1%), and damage to adjacent teeth (6.6%).[6]

A retrospective study conducted in Tehran, Iran between 2002 and 2008 showed that the majority of complaints were in fixed prosthodontics and oral surgery. Most of the cases were against general dentists. In 56.7% of clinical and 40% of misconduct (non-clinical) dental malpractice claims, dentists were found at fault.[7] A survey of dental malpractice claims in Brazil reported that endodontics was the most involved dental speciality with the highest prevalence of litigation.[2] Maxillofacial and oral surgery, endodontics and fixed prosthodontics are the dental specialities most often involved in litigation.[2,4,7,8,9]

What are dentists' ethical duties and obligations to a patient?

Dentists assume unique moral duties in presenting themselves to society as being uniquely qualified to care for oral health. Ethics is used as a generic term for various ways of understanding and examining moral behaviour.[10] The application of fundamental ethical principles provides various ways of understanding and examining moral behaviour,[11] inquiring why an individual action is right or wrong, or establishing the reasons why a person is good or bad.[12] Many ethical dilemmas don't have clear answers and sometimes it is truly a matter of choosing the most right or least wrong choice. Ethical decision-making is finding the middle ground on an ethics continuum where on the one extreme is 'right' or 'good' and the other extreme is 'wrong' or 'bad'.

Dentistry has historically been a caring profession with core ethical obligations that center on the duty to treat and prevent disease and ultimately to promote well-being.[13] Our clinical decision-making, behaviour or conduct, and

standard of care is guided by a professional or ethical code of conduct, which is based on four fundamental ethical principles (described in detail below): (1) autonomy (patients' right to make or participate in decision-making and make their own choices); (2) non-maleficence (preventing harm); (3) beneficence (promoting or doing good); and (4) justice (fairness in treating each other justly).[11] General guidelines on duties and obligations and conduct for expressing these fundamental ethical principles is provided in detail by the Health Professions Council of South Africa.[14] A duty is an obligation to do or refrain from doing something. Our duties to act in the best interest of the patient, doing good, preventing harm, truthfulness and fairness reflect the underlying nature of the dentist-patient relationship. Ethical guidelines help clarify the path of what's appropriate and what's not.

1. Autonomy (Right to self-determination)

Autonomy is defined as the patient's right to make or participate in decision-making and make their own choices. The principle of autonomy expresses the concept that dental clinicians have a duty to respect the patients' right to select or refuse treatment according to their desires, within the bounds of accepted treatment. Dental clinicians' primary obligations include involving patients in treatment decisions in a meaningful way with due consideration being given to their needs, desires and abilities, facilitated by the process of informed consent.[15]

Patients should be educated to fully comprehend the treatment plan, treatment sequencing and ultimate restoration possibilities, expected treatment outcomes, and the patient's responsibilities towards achieving and maintaining a successful outcome.[16] Signed informed consent is of little value if given by a patient who is unable to comprehend what was signed or the implications of treatment.

Complex treatment plans require more detailed descriptions and discussions. It is essential that the patient understands this and is given the opportunity to ask questions to clarify any matters. Dental clinicians should elaborate on different treatment options available, the advantages, risks, costs involved of each alternative, their prognosis and long-term consequences, and allow patients the opportunity to participate in treatment planning discussions rather than focusing on promoting the most profitable treatment option. It is the authors experience that often patients are given treatment options based on the particular skills of a clinician, rather than what is in the best interest of the patient. To refer a patient to another practitioner who is more capable to assist with a certain treatment option is certainly not an indication of incompetence by the referring clinician. Most patients will readily accept such a referral if it is explained that as being in their best interest. By listening to the desires and wants of patients and communicating relevant information openly and truthfully, dental practitioners assist patients in making informed choices about the treatment options available and also empowers the patient to participate in achieving and maintaining optimum oral health. Patients who are fully informed will better understand the treatment and implications thereof and how to maintain optimum oral health to ensure a predictable and successful outcome. In addition, a patient that demands and accepts a complex and costly treatment plan will then also accept more responsibility for their treatment. The final choice of treatment is largely dependent upon the patient's expectations, desires, financial budget and willingness to undergo treatment.[17]

• *Informed consent*

Before subjecting a patient to any proposed treatment, their tacit agreement, or informed consent is essential. This is both an ethical and a legal requirement. A competent patient will be able to make a choice based on an understanding of the information given to him/her, an appreciation of the diagnosis, the procedure proposed and its consequences, and will be able to reason and weigh up the various treatment options.

Informed consent is obtained by conducting a structured, formal consultation with a patient to explain the goals of treatment. It should include alternative options, the probable benefits (advantages) and actual or potential risks (disadvantages) of treatment, costs of each treatment, and the risks of non-treatment prior to performing procedures.[10,18,19]

• *Conditions of consent*

Consent must be voluntary – that is – the patient must not be manipulated or coerced into consenting. According to the National Health Act of No 61 of 2003, Chapter 2 Section 6 the following information must be given to the patient:

- Range of diagnostic procedures and treatment options available.
- Benefits, risks, costs and consequences associated with each option.
- User's right to refuse care and explain implications, risks and obligations of such refusal.
- Furthermore, this information must be provided in a

language that the patient understands and in a manner that takes into account the patient's literacy level.

The dentist's recommendation is important, but in advising patients, it is essential that the patient's best interests are paramount. The "best interest" of patients means that professional decisions of proposed treatments and any reasonable alternatives proposed by the dentist must consider the fundamental ethical principles, as well as the values and personal preferences of the patient. This must be done in a manner that allows the patient to become involved in the decision-making process. Consent forms cannot replace an informed treatment discussion and thorough documentation in the dental chart before any work begins.

- *Material risks*

Dentists are obligated to warn patients of "material risks" inherent in the proposed treatment or procedure. Risks are regarded as "material" if:

(i) a reasonable person in the position of the patient, if warned of the risk, would attach significance to it, and

(ii) the practitioner concerned should be reasonably aware that the patient, if warned of the risk, would attach significance to it.

- *Confidentiality*

Dental health care providers are obligated to tell the truth, protect confidentiality and respect privacy.[12]

2. Non-Maleficence (Do no harm)

The ethical principle of "first, do no harm," is a fundamental feature of the foundation of health practice since Hippocratic times and is considered to be a moral imperative of health practitioners' behaviour. This principle expresses the concept that dental clinicians have a duty to exercise care, and to refrain from harming the patient e.g. doing irreversible harm or placing teeth at risk by selecting inappropriate therapies and not informing patients of unavoidable risks.[20,21] Under this principle the dentists' primary obligations include keeping knowledge and skills current, knowing one's own limitations and limiting and managing risks with the ultimate aim of minimizing harms and maximizing benefits for the patient.

No treatment comes without risks or failures. There are actual and potential risks in each treatment that may result in varying consequences, complications, and harm either physically, emotionally or financially. Harm from overuse, misuse, errors, failures, technology and material flaws, accidents, complications, and known risks are all consequences of treatment that must be avoided wherever possible.[22]

Quality and safe dentistry can only be provided when both the clinician and the patient make treatment-planning decisions based on the patient's general health status, oral health, functional and aesthetic needs. The treatment recommended should be scientifically proven (evidence-based), safe, predictable, cost-effective, and respectful of patient preferences, and should be aimed at preserving normal tissue and function.[23]

3. Beneficence (To promote or to do good)

The principle of beneficence expresses the concept that professionals have a duty to care for and to act in the patient's best interest. Under this principle the dentist's primary obligation is service to the patient with the aim of benefiting or improving the patient's oral health. The most important aspect of this obligation is the competent and timely delivery of appropriate and safe dental care within the bounds of clinical circumstances presented by the patient.[20] Patients rely on trust, the dentist's expertise and a professional diagnosis to assess their treatment needs.

Dental care is only a small part of the whole system of healthcare and quality of life. Beneficence could be applied for medical reasons, preventive purposes, health promotion, or it could be structural, functional or aesthetic in nature. In addition to the patient's main complaint and/or requests, the overall treatment plan should include and manage the periodontal health, tooth structure and occlusal health to ensure a successful treatment outcome with long-term stability. The dentist is responsible to do what is best for the patient, on a physical and emotional level. Every patient should be presented with an ideal treatment plan that has been developed to take into consideration the patient's clinical, functional, and aesthetic needs, before a compromise or alternative plan is provided. Dentists are responsible to provide a high standard of professional care, are accountable for the intended benefit and outcome of any treatment and should not harm patients while delivering such comprehensive oral health treatment.

4. Justice (fairness)

The fourth fundamental ethical principle is justice. Justice expresses the concept of fairness in treatment, respect for patient's rights and demands consideration of fair distribution of scarce resources.[12] Justice requires that dental healthcare

providers ensure patients are given the same treatment options as anyone would receive in a similar position, regardless of financial status.

What is the difference between dental malpractice, negligence and misconduct?

• *Dental malpractice*

Dental malpractice is defined as the failure of a dental professional to follow the accepted standards of care of his/her profession resulting in harm, injury or loss.[24,25] Malpractice is a type of negligence, and is often referred to as professional negligence.

• *Negligence*

Negligence refers to a breach of duty of care where professional conduct falls below the standard of care,[25] failure of the clinician to use reasonable care and skills in rendering services to a patient,[24] or failure to protect a patient against unreasonable risk of harm, injury, loss or damage.[25] Harm through negligence caused by carelessness (not intentional harm), is known as tort law.

Proof of negligence is based on comparing the actions with those that a reasonable clinician, under the same circumstances would have performed.[25]

Disgruntled or dissatisfied patients often present to a different practitioner for a second opinion when they feel they have been mistreated. This puts the second clinician in a difficult position of trying to establish whether the actions were negligent or severe enough to constitute malpractice. Questions to ask include: was the aim to provide a therapeutic benefit, to protect the patient, to prevent harm, to remove conditions that could lead to future harm and was the treatment aimed at promoting the patients best interests.[25]

• *Misconduct*

Professional misconduct is defined as inappropriate, abusive, or illegal behaviour by a professional and implies an intentional compromise of ethical standards with the intent of benefitting the clinician.[24]

Examples of professional misconduct include: claiming for services not rendered, over-servicing, violating regulations governing the dental profession,[1] inappropriate relationship with a patient, issuing fraudulent medical certificates, breach of confidentiality and failure to obtain valid informed consent.

It is not within the scope of this review to cover the complex subject of misconduct.

What does 'Standard of Care' in dentistry mean?

Standard of care is what a reasonable, prudent dentist would do under the same or similar circumstances while applying scientific evidence-based care.[26] Standard of care is the same for all clinicians, whether general practitioners or specialists.[26] Whilst clinical training, educational and continuing education levels vary widely, the general practitioner is expected to perform dental services with the caution, skill and prudence of a specialist.[26,27] The over-riding criteria for standard of care is whether it is in the best interest of the patient.

Standard of care means practicing clinical and evidence-based dentistry as per relevant and current-based literature,[27] and should reflect changing and evolving new technologies, dental materials, and methodologies.[26] Every speciality and aspect of dentistry has optimal technology and methodologies that are indicated to uphold the current standard of care.[27]

In endodontics this would include the use of cone beam computed tomography (CBCT) for three dimensional radiographs to facilitate diagnostic interpretations, and a surgical microscope or loupes to allow for high power magnification and visualization. The above is not to say that practicing without these or similar technologies is below the standard of care, but it is suggested that the further the clinician is from such utilization, the closer to negligence they may be, especially in the event of a harm or injury.[27] Negative clinical outcomes and complications happen every day, but are not a proof of a deviation of the standard of care.[27]

Dental malpractice claims – legal considerations that dentists should keep in mind

• *Proving negligence or malpractice*

Standard of care exists within the definition of 'malpractice' or 'negligence' which has four elements, and all must be met if it is to be used as grounds in a malpractice suit. The four elements required for proving negligence or malpractice are: [25,26]

Duty: *The clinician (defendant) had a duty or an obligation to the patient (plaintiff).*

The patient will need to show that he or she had a professional relationship at the time of the incident. A person

cannot claim, for instance, if an off-duty dentist gave bad advice at a cocktail party.

Breach: *The clinician breached or did not follow this duty, or failed to conform to the required standard of care.*

Patient dissatisfaction is not a ground for a malpractice lawsuit. Dental malpractice suits can be brought against practitioners only when they fail to uphold the acceptable standard of care, or when a practitioner provides treatment that exceeds the patients informed consent. The patient will have to prove that the dentist either unintentionally failed to provide the acceptable standard of care, or the dentist intentionally committed an act that no other qualified and reasonable dentist would have committed when dealing with a similar situation.

The patient will need to show that the dentist breached his/her duties of care according to parameters of the professional relationship.

Causation: *The harm suffered by the patient was as a direct result of this breach of duty or sub-standard conduct.*

The patient must prove that the dental practitioners' incompetence or negligence caused the injury.

Damages: *Damages sought have a direct relation to the harm caused.*

The patient must prove that the actions or non-actions of the dentists caused real and compensable damages or harms, such as medical bills, personal injuries, lost wages, pain or suffering.

• *Reasonable person rule*

One of the most important arguments used in negligence law is that of the "reasonable person" which provides the standard by which conduct is measured.

By definition a dentist has acted in a negligent manner if they have departed from the conduct expected of a reasonable, prudent dentist acting under similar circumstances.

It considers many factors including the dentists' knowledge, experience, and perceptions, the activity they are engaging in and the circumstances surrounding their actions.[24]

• *Specials skills and reasonable care*

In the dental/medical context, when a clinician engages in a procedure requiring special skills, education, training, or experience, the standard by which their conduct is measured is the conduct of a reasonable, skilled, competent, and experienced person who is a qualified member of the group authorized to engage in that activity or procedure. A dentist cannot deny personal knowledge of basic aspects of a specific activity or procedure that are known and practiced by their peers. This is important for those dentists performing implant treatment, especially the surgical part thereof, where ignorance of anatomy and/or surgical skills may lead to harm.

The law does not a have a special allowance for beginners with regard to special skills, and holds everyone to the standard of conduct of persons who are reasonable, skilled and experienced in the activity or procedure.[24]

• *Impairment, mental capacity and intoxication*

A dentists' physical characteristics or other impairments, including mental capacity, does not excuse them from acting according to the reasonable person standard.

• *Emergencies*

In the case of emergencies, the law recognizes that "even a reasonable person can make errors of judgement in such situations, and their conduct will be evaluated in light of whether it was a reasonable response under the circumstances, even though, in hindsight, another course of action might have avoided the injury".[24] In other circumstances, failure to anticipate the emergency could constitute negligence, as a reasonable person would have anticipated, and taken precautions against, the foreseeable emergency.[24]

• *Patient conduct*

A clinician could also be held negligent by virtue of the patient's conduct. The law may consider that a trained professional should have taken into account the possible conduct of the patient, and regulated their own conduct accordingly.[25] For example, administering a double mandibular block to a child without anticipating that they would not understand the implications and damage they may inflict on themselves if they chewed while their mouth was still anaesthetized, is negligent.[25] Even adults given bilateral inferior alveolar nerve blocks experience loss of control of the tongue, collection of fluid in the oral cavity, weak bolus propulsion during swallowing and possible aspiration.[28]

• *Proof of negligence and expert witnesses*

Proof of negligence is based on comparing the actions with those that a reasonable clinician, under the same circumstances, would have performed.[25] Expert witnesses (colleagues) are often called upon to provide

information beyond the common knowledge of the legal representatives, such as scientific evidence, interpretation of special investigations and test results, diagnosis and clinical procedures performed. They will also be asked to report on the extent of the damage caused by the accused colleague, and ascertain whether the accepted standard of care was given and provide a report on their findings. A report from an expert witness should not include personal allegations, accusations or assumptions of guilt.[25] The expert witnesses' report could be presented in a court of law, and all observations, opinions and deductions should be defensible and justifiable. Also consider that one never knows the exact circumstances, or issues that may have been beyond the clinician's control which could account for their actions.[25]

• Patient negligence and dual responsibilities

There are times when the patient could have acted in a negligent manner, by not following the clinicians instructions and thus adding to their own injury or damage. This is called "contributory negligence", and often results in their being unable to claim for damages caused by the clinician.[25] To this end, clinicians can protect themselves by always giving written instructions to patients, preferably via email before the procedures. This may include all aspects regarding the post-operative home care, i.e. "As you will receive a double lower jaw block injection, you should not chew or eat anything until such time as the injection has worn off. This is to prevent you from damaging the tongue, cheek or lips"

What are the common causes/reasons for dental malpractice?

Several common scenarios are associated with dental malpractice.

• Limited or inadequate diagnostic testing

A dental record should include, but not be limited to: medical history (updated periodically), charting of restorations, tooth decay, missing teeth, occlusion, temporomandibular joint status, cancer screening, periodontal screening, presence of diseases and pathology in all forms, and radiographic records where indicated.[27]

• Inadequate treatment planning

Inadequate or no treatment planning is a frequent cause for dental malpractice.[7] Deviations of the initial treatment plan should be clearly indicated. Dental records should at all times be adequate and contain exact and comprehensive descriptions of every procedure, event or interaction.[27]

With inadequate records the dentist will be at risk for being asked the following valid question by an attorney: "How can you testify as to what happened if your dental record does not detail the event and/or refresh your memory?"[27] Written records should be in black ink if possible.

• Lack of informed consent and poor record keeping

When a patient initiates a relationship with a general practice, there should be a written general informed consent covering the common areas of the doctor patient relationship and practice policies.

When a patient is engaging in a specific activity or procedure, there should be much more specific written informed consent detailing the procedure, alternatives, risk of the procedure and show that all the patient's questions were answered in advance of the treatment.[27]

• Clinical / treatment errors

Clinical and technical errors during treatment are common causes in malpractice cases.[7,9,29]

• Unfavourable and unsuccessful clinical outcomes not normally expected from the procedure

Some procedures do end with unsuccessful or unfavourable results even if the patient signed a consent document. The patient may need money to enable emotional and physical recovery. If the harm was caused by a lack of or inadequate procedure done by the dentist, this is usually part of the damages owed to the patient.

Although negative clinical outcomes happen every day, they are not proof of a deviation of the standard of care. In the case of malpractice claims, plaintiff (patient) attorneys are looking for why a routine procedure caused the patient injury or harm and where the dentist went wrong or failed.[27] For example, if a tooth is abscessed, the patient is visibly swollen (has pus surrounding the tooth), the appropriate care is to open the tooth to gain access to the pulp chamber, perform drainage, place medication inside the canals and prescribe appropriate medication (e.g. antibiotics and anti-inflammatory medication) and bring the patient back for completion of the root canal treatment once the swelling and pain has resolved. To finish the root canal treatment in one visit under these clinical conditions, could easily exacerbate the infection and land the patient in hospital with a potential life-threatening condition. Such an action

taken by a clinician is below the standard of care for the given clinical circumstance.

• Lack of communication and adequate patient management

It is almost universal that the patient who has lost trust in his/her dentist, and where the dentist did not respond in a communicative, compassionate empathetic manner, is much more likely to bring some kind of action or claim against a dentist.[27] Lack of communication between the dentist and patient can help an attorney to establish the causal link between the injury and the deviation of the standard of care by showing the dentist was distracted, had poor organizational skills, or was not keeping up with the standards expected of a clinician doing specialist procedures.[27]

Patients who relocate to a different geographical area often change dentist. Practitioners then get to see their predecessors work. If a practitioner is faced with such a situation, make objective and observational statements. Think very careful about what you want to say and do not try to impress the patient by making negative comments about your colleague. Instead of saying: "Man, he really did a shoddy job in placing this implant", rather say " Your implant is showing because there is no bone to support the soft tissue".

Transgressions and common forms of dental malpractice

Analyses of malpractice claims in South Africa revealed the following common forms of dental malpractice:[4]

- Oral surgical malpractice claims mainly comprised of poor presurgical planning and implants being placed in the incorrect position, thereby compromising the final prosthodontic rehabilitation of the patient. Following these complications, dentists also failed to adequately manage and to appropriately refer these patients. Exodontia malpractice claims included broken or fractured roots, lingual nerve damage and oro-antral opening, and failure to diagnose surgical emphysema.
- Endodontic transgressions included failure to diagnose root perforations during the performance of a root canal, and omitting to inform the patient of a fractured endodontic file.
- Prosthodontic malpractice claims mainly comprised delivery of poorly fitting dentures and failure to achieve proper occlusion.
- Periodontics – failed surgical procedures.
- Orthodontics – refusal by the clinician to remove orthodontic appliance.

Other transgressions and common reasons for dental malpractice include the following:

• Inadequate diagnostic testing

Failure to:

- make a correct diagnosis or treatment without a diagnosis
- notice/diagnose oral health problems (e.g. periodontitis, oral cancer)
- take into account a patients relevant medical history (i.e. prosthetic joint replacement)

• Inadequate treatment and clinical errors due to improper treatment

- Unnecessary extraction of teeth or extraction of the wrong tooth
- Inserting poorly fitting fixed prostheses ultimately resulting in permanent damage to teeth or periodontium
- Improper usage of dental tools, equipment or technology (e.g. Laser resulting in permanent tissue damage, pain and suffering).
- Permanent or temporary structural injuries or damage to the tongue, jaw, chin, lips or teeth

• Unfavourable outcomes

- Fracture of jaw due to a dental procedure
- Improper or negligent administration of local anaesthesia resulting in broken needles, nerve injuries resulting in permanent or temporary numbness or loss of taste or sensation
- Adverse reactions to dental drugs
- Infections following treatment
- Temporomandibular joint disorders

Practical guidelines on how to prevent and avoid malpractice claims and litigation

1. Ethical decision-making

In our treatment discussions and planning we must attempt a systematic and reasoned approach to the question: "What is the right thing to do?" This will help dental professionals to conduct a safer and more ethically-based practice.

Dental clinicians who provide evidence- based services, based on beneficence, non-maleficence, truthfulness and

respect for patient autonomy and in keeping with professional standards of care, are fulfilling their professional and ethical obligations. The ethical principles are the moral rules, foundations and justification for our treatment decisions and behaviour.

Asking the following fundamental ethical questions can help to navigate ethical minefields and assist the clinician in avoiding malpractice claims and subsequent litigation:

- Beneficence – what is in the patient's best interest?
- Non-maleficence – Will it do harm?
- Autonomy - Informed consent – Have I informed the patient appropriately
- Justice – Is it fair to the patient?

2. Balancing benefits versus risks

Balancing the benefits and risks of treatment plays a role in nearly every medical and dental decision. For every treatment option the dental clinician has to weigh and balance competing values of the patient and the service provider; searching for consistency, longevity, predictability and success in treatment outcome as well as considering the impact of our actions on patients. All treatments have potential risks. Dental clinicians have an obligation to minimize potential harms and maximize benefits of therapy. It is therefore always important to ensure that the benefits of treatment are greater than the potential harms. This fundamental ethical principle of balancing benefits against risk is critical to ensure the treatment that the patient will receive is in his/her best interest. Beneficence and non-maleficence are complementary principles because both rest on the fundamental ground rule of treatment outcome that is in the patient's best interest.

By providing informed consent, dental clinicians give patients the information necessary to understand the scope and nature of various treatment modalities and their potential risks and benefits. This empowers patients to make informed choices about the treatment they need or desire. Ultimately, the potential benefits of any therapy must always outweigh the potential risks in order for it to meet the requirement of "being in the best interest of the patient".

3. Risk management – minimizing risk exposure

Appropriate risk management protocols will not only reduce risk exposure but also improve patient care.[30]

Following are some important considerations and practical guidelines for the clinician to minimize risk exposure and to avoid malpractice claims:

• Patient assessment

Do a proper evaluation of the patient's medical, dental and personal history. Assess and understand the patient's needs, desires, expectations and suitability for dental treatment. Never ignore the patient's expectations otherwise the case is destined to fail. Always note the main complaint in the file.

• Treatment planning and record-keeping

Ensure that study models, radiographs, photographs and a diagnostic wax-up are available for the treatment work-up. Document everything - it is still your best defence in case of a complaint.

• Treatment discussion and patient education

Educate patients so that they fully comprehend all treatment possibilities, sequencing of treatment, limitations and risks. A diagnostic wax-up communicates the treatment plan to be used throughout the entire restorative process. Use photographs to illustrate the proposed treatment(s) and to document progress of treatment. Limit the act of creating false expectations and guarantees and inform patients in advance about potential risks and complications.

• Always be on the alert for medical risk factors

Be alert for risk factors such as diabetes, immunosuppressed patients, smoking, medications that may influence the outcome of treatment or have the potential to cause complications.

• Explain benefits, risks and alternatives (including no treatment)

Explain the benefits, risks and alternatives to patients as part of the consent process and record the discussion on the patient's record and in the final treatment plan. Never raise unrealistic expectations of what can be achieved.

• Obtain informed consent

Identify and disclose all positive (benefits) and negative (risks) aspects of treatment options to the patient. Obtain informed consent from the patient prior to commencing treatment and ensure that it is part of the treatment record. Never provide additional services that are beyond the patients informed consent, unless the patient signs written acceptance to such changes.

• Cost implications

Provide the patient with an estimate cost of the various treatment options before the final decision is made in terms of

a treatment plan. Let the patient know beforehand what the potential additional cost is for of treating complications (e.g. root canal treatment), re-treatments, and managing failures. This is important when a patient is to receive conscious sedation as the patient cannot consent to changes under those conditions. In the event that changes are necessary, the patient is neither surprised nor angered by incurring the additional expense.

• Recognise the limitations of your skills

Offer referral to specialists in complex cases if you lack necessary training, experience or technical competence.

• Utilizing evidence-based technologies and methodologies

Utilizing current evidence-based technology (e.g. CBCT) and methodologies in a clinical acceptable manner or prescribed protocol will vastly increase the chances for clinical success and reduce morbidity or complications.

• Continuing professional development

Ensure that you are knowledgeable in the latest dental procedures and products.

Acquire the necessary knowledge and develop the prerequisite clinical skills before attempting advanced aesthetic treatment modalities.

• Never deviate from the acceptable standard of care

Perform your duty to perfection, always provide the best possible and conservative care, always act in the patients best interest, and never place the patient's health at risk for personal gain. Allow adequate time in your schedule for excellence, quality care and artistry.

• Dental materials

Use the best evidence-based materials available that are effective, safe, predictable and affordable.

• Team effort

Work in a team if at all possible. An ideal treatment plan can often be achieved only by a team effort involving various specialists, oral hygienists and laboratory technicians.

Ensure good communication with all colleagues (inclusive of the dental technician) involved in the patient's care to ensure they understand what is expected of them.

• Dental laboratory

Choose your laboratory technician with care. Find an "artist" who understands your work, shares your work ethic and aesthetic goals and who does not mind reworking a prosthesis until it is perfect. Take advantage of the dental laboratory technician's knowledge regarding diverse restorative options offered by modern dental products. Establishing a team relationship with your laboratory technician helps build confidence and ensures consistent and successful treatment outcomes, especially in complex cases. Involve your dental technician from the start of the planning process, it will prevent disappointments later on. The dental technician is an essential member of the team.

• Treatment selection and staging

Proceed with prosthodontic, orthodontic or implant treatment only when periodontal disease and caries is under control. Always select the most conservative treatment option, especially in younger patients with un-restored healthy teeth. Less invasive or more conservative options such as bleaching, orthodontics, and resin-bonded composites should be offered to the patient as alternative options to ceramic veneers/crowns. Always give the patient an opportunity to observe the appearance and shade of veneers, crowns or bridges prior to final cementation.

• Maintenance care

Explain to patients how to care for any new implant/conventional prosthesis and stress the importance of rigorous oral hygiene and regular dental check-ups. Secure patient commitment to regular dental check-ups and oral hygiene maintenance program in order to maintain implant, periodontal and rehabilitation work performed. This is essential to long-term success. Consider a log of rehabilitation, periodontal and implant patients at your practice to ensure that appropriate recall intervals are maintained.

• Communication

Listen to your patient, be open and honest about treatment options and explain all options, not just those that you are interested or experienced in performing. If it is in the patient's best interest to be referred, then do that. In the long run it will benefit your practice and you will be seen to act with integrity.

• Deal appropriately with dissatisfied patients

Never rebuff a patient when he/she has expressed dissatisfaction with treatment at an early stage and make

a request for remediation, e.g., retreatment, referral for a second opinion or a refund. To avoid litigation in cases where dentists have been threatened or dissatisfaction expressed by the patient, the optimal course of action by the dentist is to simply refund the fees paid by the patient, refer the patient for a second opinion and/or retreat the patient at no charge.[27]

Conclusions

Dental malpractice claims are extremely expensive, emotionally stressful and time-consuming. It is therefore in the patient's as well as the clinicians' best interest to prevent dental malpractice claims. Dentists have an ethical duty and obligation towards their patients to observe ethical principles and code of conduct in practice, as well as to adhere to acceptable evidence-based standards and protocols of diagnosis and treatment. Clinicians who fail to adhere to the fundamental ethical principles not only violates the trust placed in them, but may also expose themselves to malpractice and litigation.

To provide cautious, skilful and prudent care, clinicians need adequate training and experience. Clinicians should also follow evidence-based science to advance their skills, stay up-to-date with technology, equipment and methodologies, and ensure that they have adequately trained support staff.

Every effort should be made to identify and avoid situations and procedures that may lead to potential harm. Applying ethical decision-making principles and good risk management protocols in dental practice will not only reduce dissatisfaction and risk exposure, but will also improve the standard of patient care.

To best serve the patient, dental clinicians need to act with empathy, integrity, competence and they have to communicate effectively with patients and team members. The better the communication, the less the risk and the more successful the treatment outcome. Empathy and sympathy in treating our patients may go a long way to avoid unpleasant outcomes.

References

1. Health Professions Council of South Africa (HPCSA). Ethical and professional rules of the Health Professions Council of South Africa. Guidelines for good practice in health care professions. Booklet 2. Health Professions Council of South Africa, Pretoria 2008.

2. De Castro ACC, Franco A, Silva RF, et al. Prevalence and content of legal suits found in dental malpractice courts in Midwest Brazil. Revista Brasileira de Odontolgia Legal (RBOL) 2015; 2(1): 46-52.

3. Rai JJ, Acharaya RV. Dental negligence and its liabilities in a nutshell. Ind J Dental Sci 2014; 6(5): 84-88.

4. Makwakwa NL, Motloba PD. Dental malpractice cases in South Africa(2007-2016) SADJ 2019; 74(6): 310-315.

5. Manca R, Bruti V, Napoletano S, Marinelli E. A 15 yr survey of dental malpractice claims in Rome, Italy. J Forensic Legal Med 2018; 58: 74-77.

6. Pinchi V, Varvara G, Pradella F, et al. Analysis of professional malpractice claims in implant dentistry in Italy from Insurance Company technical Reports, 2006-2010. Int J Oral Maxillofac Impl 2014; 29(5): 1177-1185.

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

8. Ozdemir MH, Saracoglu A, Ozdemir AU. Dental malpractice cases in Turkey during 1991-2000 J Clin Forensic Med. 2005; 12: 137-142.

9. Bjorndal L, Reit C. Endodontic malpractice claims in Denmark. 1995-2004. Int Endod J 2008; 41: 1059-1065.

10. Nash DA. Professional ethics and aesthetic dentistry. J Am Dent Assoc 1988; 117(4) 7E-9E.

11. Beauchamp TL, Childress JF. Principles of biomedical ethics. 5th ed. Oxford University Press 2001.

12. Jessri M, Fatemitabar SA. Implications of ethical principles in chair-side dentistry. Iran J Allergy Asthma Immunol 2007; 6(Suppl.5): 53-59.

13. Simonsen R. Commerce vs care: Troubling trends in ethics of aesthetic dentistry. Dent Clinics of North Amer 2007; (51(2): 281-287.

14. Health Professions Council of South Africa (HPCSA). General ethical guidelines for doctors, dentists and medical scientists. Guidelines for good practice in health care professions. Booklet 1. Health Professions Council of South Africa, Pretoria 2002.

15. Leffler WG. How do I justify my views on what I consider unnecessary treatment. Ethical Moment in: J Am Dent Assoc 2008; 139: 1546.

16. Fradeani M. Aesthetic rehabilitation in fixed prosthodontics, Aesthetic analysis, A systematic approach to prosthetic treatment. Volume 1. Chicago, Illinois: Quintessence 2004.

17. Palmer RM. Risk management in clinical practice. Part 9. Dental Implants. Br Dent J 2010; 209(10): 499-506.

18. Friedman MJ. A disturbing transition of the bonded porcelain veneer restoration. Oral Health Journal 2005. Accessed on the Internet at: http://www.oralhealthjornal.com/issues/story.aspx?aid-1000181328

19. Mizrahi E. Risk management in clinical practice. Part 7. Dento-legal aspects of orthodontic practice. Brit Dent J 2010; 209(8): 381-390.

20. American Dental Association. Principles of ethics and code of professional conduct. Chicago: ADA; 2005.

21. Thomas MV, Straus SE. Evidence-based dentistry and the concept of harm. Dent Clin of North Amer 2009; 53(1): 23-32.

22. Egan E. Patient safety and medical error. A constant focus in medical ethics. Virtual Mentor 2004; 6(3): Accessed on the internet at: https://virtualmentor.ama-assn.org/2004/03/fred1-0403.html

23. American Association of Endodontists. AAE Position Statement, Implants. AAE Special Committee on Implants, American Association of Endodontists, Chicago, 2007. Accessed on the Internet at: https://www.aae.org/uploadedFiles/Publications_and_Research/Guidelines_and_Position_Statements/implantsstatement.pdf

24. Legal Dictionary. The free dictionary- Negligence. Accessed on 01-04-2020. Accessed at: https://legal-dictionary.thefreedictionary.com/negligence

25. Sykes LM, Evans WG, Dullabh HD. Part 14. Negligence versus malpractice: The "Reasonable Man Rule" SADJ 2017; 72(9): 430-432.

26. Graskemper JP. The standard of care in dentistry. J Amer Dent Assoc 2004; 135(10): 1449-1455.

27. TASA ID:16998, Welch EE. Dental malpractice: is there a case? Technical Advisory Services for Attorneys (TASA Group)Accessed on April 3/04/2020 at: https://www.tasanet.com/Knowledge-Center/Articles/ArtMID/477/ArticleID/1251828/Dental-Malpractice-Is-there-a-Case

28. Jabbar J, Shekar V, Mitchell DA, Brennan PA. Should we be giving bilateral inferior alveolar and lingual nerve blocks for third molar surgery. Br J Oral Maxillofac Surg 2014; 52(1):16-27.

29. Seidberg BH. Dental litigation: triad of concerns. In: Sanbar SS. Ed. Legal Medicine. Philadelphia: American College of Legal Medicine., 2009.

30. Graskemper JP. A new perspective on dental malpractice: Practice enhancement through risk management. J Am Dent Assoc 2002; 133(6): 752-757.