

Patient Safety Practices in Dentistry: A Review

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Abstract

Dental literature reports have indicated the maximum number of deaths occurring due to negligence in clinical practice. Patient safety in today's practice is one of the most important roles for dentists. There must be the development of multi-professional curriculum guide for patient safety monitoring. For patient safety, adequate communication must be among treating dentists, clinical staff, patients, and their families. Everyone plays an important role in creating a patient safety culture in a clinical environment. Safety culture can be developed by implementing qualities of leadership, commitment, routine audits and risk assessment of hazards, safe practices, continuing educational activities for staff and patients, proper accounting.

Key words: Curriculum, Death, Dentists, Implementing, Risk

INTRODUCTION

Dentists handle dangerous drugs and use advanced technical appliances (e.g. lasers, electrocautery, ionizing radiation) cause serious harm. Dentists and dental assistants come into contact with blood and body fluids that can transmit infectious diseases. Promotion of patient safety is an ethical obligation in any health care profession. Hippocratic principle promotes the principle "Primum Non Nocere" (first, do no harm). Minimize danger inherent in treatment and avoid the occurrence of any possible complications. Any dental care in which all possible risk factors can be controlled represents highest-quality dental care, and there is a clear relationship between the quality of treatment and the success of outcomes.¹ Quality assurance/improvement provide better legal security for dental practitioners.

Safety of patient and henceforth practitioner are correlated. Continuous investigations are prevailing regarding particular knowledge pertaining to accidents and complications which are associated with the use of materials, general procedures

and clinical facilities.² It is multifactorial and very complex. The focus must be on the latent risks, way in which clinical information is transmitted between professionals, requirements that staff work excessively long hours and installation of floor warning sensors that becomes slippery when it is wet.³ It is a part of the non-punitive character that patient safety doesn't seek to punish the guilty.

Methodological Peculiarities

It is of prime importance regarding classification and analysis of adverse events and taking proposed corrective measures.⁴ Prospective analysis would be identify the potential risks associated with treatment, work organization, appliances or new materials failure mode and effects analysis. Retrospective analysis would be regarding events important with frequency, characteristics, severity (sentinel events), health care error, an accident in office, poorly treated clinical complications.⁵⁻¹⁰

Root cause analysis considering the organization of labor; the materials and appliances available; patient characteristics; the continuing education of professionals; the transmission and storage of information.¹¹ Preparing a risk map with procedures that practitioners wish to start applying and allows for the implementation of measures to reduce the likelihood of these risks materializing, or, at least, limit their consequences if they do emerge. Analysis of problems acquired during daily practice, acquired habits, time pressure, haste, inertia, and fatigue.

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Safety Culture

It is the product of individual and group values, attitudes, perceptions, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of an organization's health and safety management.¹²⁻¹⁵ It compels us to share our experiences and data, both good and bad, with our colleagues so that everyone can learn from them. Providing a firm organization goal, mission and culture along with cores of leadership, teamwork, provision of evidence-based care, communication, learning, patient-centered. Making an institutional culture of patient safety through strategic planning, learning from errors, commitment to leadership, documenting and improving patient safety, encouraging and practicing teamwork, spotting potential hazards and using systems for reporting and analyzing adverse events and measuring improvement.^{16,17}

What Needs to be Done

The policy-makers must ensure measures to improve the culture of safety. Academicians must incorporate principles into educational curricula and organizations must promote patient safety. There must be a multidisciplinary team training of dentists, continuous quality improvement tools, innovative human resources, practices, and policies.¹⁸

Measurement of Patient-safety Climate

Methods of analysis according to purpose to which they will be put. The need to tailor different or even unique strategies that accommodate particular circumstances of each organization.¹⁹

Patient Safety in Dentistry

Applying safety measures like:

1. Educating staff regarding patient safety culture
2. Understanding our current situation
 - a. Recall and analyze adverse events encountered
 - b. Check correctness of 20 medical records chosen at random
 - c. Review our protocols for cleaning and sterilizing non-disposable instruments
 - d. Review our protocols for action in a life-threatening emergency.
3. Devising protocols to make maneuvers and activities in potentially less dangerous criterias
4. Establishing "Safety Instructions" (red lines)
 - a. Do not perform Root Canal Treatment (RCT) without rubber dam
 - b. Never re-use containers designed for single-use only
 - c. Never prescribe any drug without consulting patient clinical record and without directly asking the patient about allergies or other health problems

- d. Never take X-ray in a woman of child-bearing age without protection and without asking possible pregnancy
- e. Sharing experiences in patient safety with our colleagues.^{21,22}

Errors in Clinical Documents, Information, and Referral of Patients

1. Histories which lack essential data (clinical and allergic background and updated information about medication)
2. Use of abbreviations (or bad handwriting) that lead to confusion on the part of other professionals at the same center using the same history
3. Failure to provide adequate information to the patient about the procedure, its potential risks or recommendations that must be followed to avoid complications
4. Inaccuracies in patient referrals to other professionals that may lead them to make mistakes.

Prescribing Errors

1. Errors in the indication for the drug (in relation to the type of drug, dose or duration of treatment)
2. Allergic reactions that occur because of a lack of adequate medical records
3. Drug interactions that occurs because the prescribing practitioner lacks the relevant pharmacological knowledge or fails to update the list of drugs taken by the patient
4. Wrong dose of the drug (especially common in children and in patients with alterations in the metabolism or elimination of drugs)
5. Duplication of drugs (especially common with anti-inflammatories) because of a lack of coordination among the various professional prescribing for the same patient.²³

Surgical Events

1. Errors in treatment planning (sometimes associated with lack of adequate clinical records previous to treatment)
2. Errors in the type of procedure performed (motivated by incorrect patient identification or inadequate clinical history)
3. Errors in the area of intervention (Wrong-site surgery) that occur as a result of forgetfulness or the inappropriate interpretation of records by the professional
4. Errors in pre-operative prophylaxis in medically compromised patients
5. Errors in the monitoring and control of operated patients (no post-operative instruction sheet or lack of post-surgical control)

6. Post-surgical infections (detected late or inadequately treated).¹⁶

Accidents

1. The patient falls (due to poorly organized furniture, architectural barriers, slippery floors, etc.)
2. Heavy or sharp instruments or apparatus fall on the patient
3. The patient suffers accidental cuts and burns
4. The patient ingests/inhales small dental material
5. The patient suffers eye damage.²³

Goals of Patient Safety

1. Correctly identify the patients
2. Effective communication
3. Safety alert for High-alert medicines
4. Eliminate errors like wrong-side, wrong-patient, wrong procedure surgeries
5. Reduce the health-care acquired diseases
6. Reduce risk of patient hurt against equipment, falls.²⁰

CONCLUSION

Patient safety can be improved using proper protocols, education, communication, learning initiatives from hazards that had taken place earlier, rectification, six-sigma monitoring, and safety standards. Every clinician must make it mandatory to follow the patient safety standards. The strict body must be maintained who monitors and regulates these principles being followed in hospitals and clinics.

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