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Policy on Patient Safety

Review Council

Council on Clinical Affairs

Revised

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Purpose

The American Academy of Pediatric Dentistry (**AAPD**) recognizes patient safety as an essential component of quality oral health care for infants, children, adolescents, and individuals with special health care needs. The AAPD encourages dentists to consider thoughtfully the environment in which they deliver health care services and to implement practices to improve patient safety ~~that decrease a patient's risk of injury or harm during the delivery of care~~. This policy is not intended to duplicate safety recommendations for medical facilities accredited by national commissions such as T~~t~~he Joint Commission ~~on Accreditation of Healthcare Organizations~~ or those related to workplace safety such as Occupational Safety & Health Administration.

Methods

This policy was originally developed by the Council on Clinical Affairs and adopted in 2008. This policy is based on a review of current dental and medical literature, including a literature search of the MEDLINE/PubMed® electronic data base using the terms: patient safety AND dentistry, fields: all; limits: within the last 10 years, humans, English. ~~Ten articles matched these criteria.~~ Eight hundred twenty-two articles met these criteria. Papers for review were chosen from this list and from the references within selected articles.

Background

All health care systems should be designed to provide ~~promote~~ a practice environment that promotes patient safety.[1] ~~health and protection.~~ The World Health Organization (WHO) defines patient safety as "the reduction of risk of unnecessary harm associated with healthcare to an acceptable minimum."[2]. The most important challenge in the field of patient safety is prevention of harm, particularly avoidable harm, to patients during treatment and care.[2]. Dental practices must be in compliance with federal laws that help protect patients from preventable injuries ~~misuse of personal information~~ [e.g., ~~Health Insurance~~

~~Portability and Accountability Act (**HIPAA**)] (US DHHS National Standards, WHO Guidelines, Boyce and Pittet, AAPD Infection Control)~~ and potential dangers such as the transmission of disease.[3,4,5] ~~State and local l~~ Laws help regulate hazards related to ~~potential~~ chemical and environmental factors (e.g., spills, radiation) ~~hazards~~ and facilities (e.g., fire prevention systems, emergency exits)[6]. American Academy of Pediatric Dentistry best practices and oral health policies provide additional information regarding the delivery of safe pediatric dental care[7-18]. Furthermore, state dental practice acts and hospital credentialing committees are intended to ensure the safety of patients and the trust of the public by regulating the competency of and provision of services by dental health professionals.[19,20,21].

~~Designing~~ Patient-centered health care systems that focus on preventing errors ~~and being more efficient and patient-family centered is~~ are critical to assuring patient safety[21,22]. Some possible sources of error in the dental office are miscommunication, interruptions, stress, fatigue, failure to review the patient's medical history (e.g., current medications ~~drugs~~ and allergies ~~medications~~), and lack of standardized records, abbreviations, and processes.[1,21,23]. Treating the wrong patient or tooth/surgical site, delay in treatment, disease progression after misdiagnosis, inaccurate referrals, incorrect medication dosages ordered/administered, unintentional swallowing, aspiration, or retention of a foreign object, and breaches in sterilization are examples of patient safety events that occur in dentistry.[24,25,26,27,28]. Adverse events may be classified in terms of severity of harm.[29].

Standardiz~~ation~~ed processes and workflows help~~s~~ assure clerical and clinical personnel execute their responsibilities in a safe and effective manner.[23]. Policy and procedure manuals that describe ~~each~~ a facility's established protocols serve as a valuable training tool for new employees and reinforce a consistent approach ~~for~~ to promoting safe~~,~~ and quality patient care[23]. Identifying deviations from ~~such~~ established protocols and studying patterns of occurrence can help reduce the likelihood of adverse events.[23,28,30].

Safety checklists are used by many industries and healthcare organizations to reduce preventable errors.[31,32]. Data supports the use of procedural checklists to minimize the occurrence of adverse events in dentistry (i.e. presedation checklist).[33,34,35]. In addition, order sets, reminders, and clinical guidelines built into an electronic charting system may improve adherence to best practices.[28].

Reducing clinical errors requires ~~a~~ careful examination of adverse events~~,~~ and ~~including '~~near miss~~es',~~ events. ~~and root cause analysis of how the event could be avoided in the future so that safety practices can~~

~~be implemented.~~ [22,36] In a near miss event, an error was committed, but the patient did not experience clinical harm.[22,36]. Detection of errors and problems within a practice or organization may be used as teaching points to motivate changes and avoid recurrence.[37]. A root cause analysis can be conducted to determine causal factors and corrective actions so these types of events may be avoided in the future.[31,38,39]. Embracing a patient s~~S~~afety culture demands a ~~culture in which communication does not depend on hierarchy;~~ a non-punitive or no blame environment that ~~culture~~ encourages all personnel regardless of position to report errors and intervene in matters of patient safety.[1,22,38]. Alternatively, a fair and just culture is one that learns and improves by openly identifying and examining its own weaknesses; individuals know that they are accountable for their actions, but will not be blamed for system faults in their work environment beyond their control.[39]. Evidence-based systems have been designed for healthcare professionals to improve team awareness, clarify roles and responsibilities, resolve conflicts, improve information sharing, and eliminate barriers to patient safety.[40,41,42].

The environment in which dental care is delivered impacts patient safety. In addition to structural issues regulated by state and local laws, other design features should be planned and periodically evaluated for patient safety, especially as they apply to young children. Play structures, games, and toys are possible sources for accidents and infection.[43,44].

~~Consequently, t~~ The dental patient would benefit from a practitioner who follows current literature and participates in professional continuing education courses to increase awareness and knowledge of best current practices.[45]. Scientific knowledge and technology continually advance, and patterns of care evolve due, in part, to recommendations by organizations with recognized professional expertise and stature including: the American Dental Association, The Joint Commission (National Patient Safety Goals 2017), WHO, Institute for Health Improvement, and Agency for Healthcare Research and Quality. ~~Some recommendations can be based only on suggestive evidence or theoretical rationale (e.g., infection control); other concerns of clinical practice remain in flux (e.g., materials utilized in restorative dentistry). Consequently, the dental patient would benefit from a practitioner who follows current literature and participates in professional continuing education courses to increase awareness and knowledge of best current practices.~~ Data-driven solutions are possible through documenting, recording, reporting, and analyzing patient safety events.[26, 46,47]. Continuous quality improvement efforts including outcome measure analysis to improve patient safety should be implemented into practices.[28,45]. Patient safety incident disclosure is lower in dentistry compared with medicine since a dental-specific reporting system

does not exist in the United States. [47]. Identifiable patient information that is collected for analysis is considered protected under the Health Insurance Portability and Accountability Act (**HIPAA**).[48,49].

~~The AAPD emphasizes safe, age-appropriate, nonpharma-cological or pharmacological behavior guidance techniques for use with pediatric dental patients. It is important to base behavior guidance on each patient's individual needs with goals of fostering a positive dental attitude, safety, and providing quality dental care (AAPD Behavior Guidance). Appropriate diagnosis of behavior and safe and effective implementation of advanced behavior guidance techniques (i.e., protective stabilization, sedation, general anesthesia) necessitate knowledge and experience that generally are beyond the core knowledge that students receive during predoctoral education (AAPD Behavior Guidance, AAPD Protective Stabilization).~~

Policy statement

To promote patient safety ~~health and protection~~, the AAPD encourages:

1. Patient safety instruction in dental curricula to promote safe, patient-centered care ~~(Kiersman, Plake and Darbishire 2011)~~.
2. Professional continuing education by all licensed dental professionals to maintain familiarity with current regulations, technology, and clinical practices.
3. ~~Compliance with federal laws such as HIPAA to protect patients against misuse of information identifiable to them (US DHHS National Standards).~~
3~~4~~. Compliance and recognition of the importance of infection control policies, procedures, and practices in dental health care settings ~~in order~~ to prevent disease transmission from patient to care provider, from care provider to patient, and from patient to patient ~~(WHO Guidelines, Boyce and Pittett, AAPD Infection Control)~~.
4~~5~~. Routine inspection of physical facility in regard~~s~~ to patient safety. This ~~would~~ includes development and periodic review of office emergency and fire safety protocols and routine inspection and maintenance of clinical equipment.
5~~6~~. Recognition that informed consent by the parent is essential in the delivery of health care and effective relationship/communication practices can help avoid problems and adverse events ~~(AAPD Informed Consent)~~. The parent should ~~be encouraged to~~ understand and be actively engaged in the planned treatment~~be an active participant in the child's care~~.
6~~7~~. Accuracy of patient identification with the use of at least two patient identifiers, such as name and date of birth, when providing care, treatment, or services ~~(JCAHO 201712/13)~~.

7~~8~~. An accurate and complete patient chart that can be interpreted by a knowledgeable third party ~~(AAPD Record-Keeping)~~. Standardizing abbreviations, acronyms, and symbols throughout the record is recommended.

8~~9~~. An accurate, comprehensive, and up-to-date medical/dental history including medications and allergy list to ensure patient safety during each visit ~~(AAPD Record-Keeping)~~. Ongoing communication with health care providers, both medical and dental, who manage the child's health helps ensure comprehensive, coordinated care of each patient.

9~~10~~. A pause or time out with dental team members present before ~~an~~ invasive procedure(s) to confirm the patient, planned procedure(s), and tooth/surgical site(s) are correct.

10~~11~~. Appropriate staffing and supervision of patients treated in the dental office.

11~~12~~. Adherence to AAPD recommendations on behavior guidance, especially as they pertain to use of advanced behavior guidance techniques (i.e., protective stabilization, sedation, general anesthesia) ~~(AAPD Behavior Guidance, AAPD Protective Stabilization)~~.

12~~13~~. Standardization and consistency of processes within the practice. A policies and procedures manual, with ongoing review and revision, could help increase employee awareness and decrease the likelihood of untoward events. Dentists should emphasize procedural protocols that protect the patient's airway (e.g., rubber dam isolation) ~~(AAPD Restorative)~~, guard against unintended retained foreign objects (e.g., surgical counts; observation of placement/removal of throat packs, retraction cords, cotton pellets, and orthodontic separators), and minimize opportunity for iatrogenic injury during delivery of care (e.g., protective eyewear).

13~~14~~. Minimizing exposure to nitrous oxide by maintaining the lowest practical levels in the dental environment. This ~~would~~ includes routine inspection and maintenance of nitrous oxide delivery equipment as well as adherence to clinical ~~guidelines~~ recommendations for patient selection and delivery of inhalation agents ~~(AAPD N2O Policy)~~.

14~~15~~. Minimizing radiation exposure through adherence to ALARA (as low as reasonably achievable) principle, equipment inspection and maintenance, and patient selection criteria ~~(ADA 2012)~~.

15~~16~~. All facilities performing sedation for diagnostic and therapeutic procedures to maintain records that track adverse events. Such events then can be examined for assessment of risk reduction and improvement in patient safety ~~(AAPD/AAP Sedation Guideline)~~.

16~~17~~. Dentists who utilize in-office anesthesia ~~care providers~~ personnel take all necessary measures to minimize risk to patients. Prior to delivery of sedation/general anesthesia, appropriate documentation shall address rationale for sedation/general anesthesia, informed consent, instructions to parent, dietary precautions, preoperative health evaluation, and any prescriptions

along with the instructions given for their use. Rescue equipment should have regular safety and function testing and medications should not be expired. The dentist and anesthesia ~~care provider~~ personnel must communicate during treatment to share concerns about the airway or other details of patient safety ~~(AAPD Anesthesia Personnel)~~.

17~~18~~. Ongoing quality improvement strategies and~~. R~~routine assessment of risk, adverse events, and near misses. ~~mistakes with a~~A plan for ~~reduction and~~ improvement in patient safety and satisfaction is imperative for such strategies ~~(JCAHO 201712/13, Ramoni et al 2012)~~.

18. Comprehensive review and documentation of indication for medication order / administration. Review current medications, allergies, drug interactions, and correct calculation of dosage.

19. Promoting a culture of patient safety where staff members are empowered and encouraged to speak up or intervene in matters of patient safety.

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