



American
Dental
Hygienists'
Association

Dental Hygiene Diagnosis:

An American Dental Hygienists' Association Position Paper

Position of the Association: Dental Hygiene Diagnosis and the Dental Hygiene Process of Care

Dental hygiene diagnosis is a necessary and intrinsic part of dental hygiene education and practice.

The dental hygienist employs critical decision-making skills to reach conclusions about the patient's needs related to oral health and disease that fall within the dental hygiene scope of practice. The dental hygiene process of care provides a framework through which the individualized needs of the patient can be met. The dental hygiene diagnosis is one component of the process and involves a thorough patient assessment and informed decision-making. The hygienist then develops the dental hygiene treatment plan which is incorporated into the comprehensive treatment plan developed by the dentist and/or other health care providers. The development of a dental hygiene diagnosis requires the use of skills to identify the source of the patient's problem.

The profession has already demonstrated the successful integration of the dental hygiene process of care in dental hygiene education and practice through the establishment of comprehensive treatment plans created by the dental hygienist and dentist working collaboratively as professional colleagues. The dental hygiene diagnosis can be integrated, as needed, into a single comprehensive care plan.

For example: A 72-year-old white male presents with brown, soft, crumbling enamel on multiple mandibular teeth at the gingival margin. While taking the medical and dental health history, it is discovered that the patient has xerostomia from his cardiac medications and sucks on sweet candies daily to alleviate dry mouth symptoms. Dental hygiene diagnosis #1: Rampant caries. Dental hygiene diagnosis #2: Xerostomia. Treatment #1: Refer for Class V restorations. Treatment #2: Patient education and prescription recommended: sugarless candies and gums with xylitol and salivary substitute rinses for xerostomia. The dental hygiene diagnosis assesses the need for treatment and recommends appropriate treatment modalities and referrals.

In order to adequately prepare graduates for the practice of dental hygiene, as well as to assume any of the professional roles of the dental hygienist, dental hygiene education programs must include theory and practice involving the dental hygiene process of care, inclusive of dental hygiene diagnosis and treatment planning.

The ADHA's policy regarding the dental hygiene process of care was established in 1986, with an additional policy adopted by the ADHA House of Delegates in 2009 with respect to dental hygiene diagnosis. These policies affirm the following tenet: the fundamental nature of the dental hygiene diagnosis as an essential component in the development of competent providers to work in all professional roles of the dental hygienist.

Dental hygiene diagnosis is a necessary and intrinsic element of dental hygiene education and scope of practice. [6-09]¹

The American Dental Hygienists' Association supports dental hygiene curricula that leads to competency in the dental hygiene process: assessment, dental hygiene diagnosis, planning, implementation and evaluation. [Curriculum 16-93]²

The American Dental Hygienists' Association supports accreditation standards that prepare entry level dental hygienists to assume all the professional roles of a dental hygienist in a variety of settings to meet the preventive and therapeutic health care needs of the public. [Accreditation 10-05/13-86]³

1-3. ADHA Policy Manual. Chicago, Ill. American Dental Hygienists' Association. http://www.adha.org/downloads/ADHA_Policies.pdf



American
Dental
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Dental Hygiene Diagnosis:

An American Dental Hygienists' Association Definition

Most dental hygienists are familiar with the definition of dental hygiene diagnosis, including how it is used in education and practice. Dental hygienists understand and appreciate how the dental hygiene diagnosis is incorporated into the comprehensive dental diagnosis made by the dentist. However, a dental hygiene diagnosis appears not to be clearly understood by other health care providers. The definition and clarification of the American Dental Hygienists' Association's (ADHA) position on this topic may assist other communities of interest, such as other healthcare providers, the public and legislators, in gaining insight and hopefully understanding on this important subject.

This background provides an overview of the profession, specific association policies regarding dental hygiene diagnosis and the process of care, and highlights the collaborative role between the dental hygienist and the dentist and other healthcare professionals in serving the patient.

The Dental Hygiene Profession

Dental hygiene is the science and practice of the recognition, treatment, and prevention of oral diseases. The dental hygienist is a state-licensed oral health professional who has graduated from an accredited dental hygiene program in an institution of higher education. Dental hygienists are advocates for oral health and integrate the roles of clinician, educator, advocate, manager, and researcher in order to prevent oral diseases and to promote total health.¹

The registered dental hygienist (RDH) or licensed dental hygienist (LDH) is educationally prepared for practice upon graduation from an accredited dental hygiene program (certificate, associate, or baccalaureate) within an institution of higher education. In order to practice,

hygienists must also successfully complete a national written board examination and state or regional clinical examination for licensure.

Dental hygienists are experts in the field of disease prevention and management. Dental hygienists are consulted about appropriate dental hygiene interventions, are expected to make clinical dental hygiene decisions, to plan, to implement, and to evaluate the dental hygiene component of the overall treatment plan.¹ Dental hygienists work in partnership with dentists and other healthcare providers and practice together as colleagues with the goal of providing optimum oral healthcare to the public.

Dental hygienists apply their professional knowledge and skills in a variety of public and private employment settings. Clinical dental hygienists may be employed in private dental offices, schools, public health clinics, hospitals, managed care organizations, correctional institutions, or nursing homes. Dental hygienists provide care under various forms of supervision, as directed by state practice acts (e.g. public health supervision, general, indirect, or direct supervision). The profession of dental hygiene is regulated at the state level by a state dental or dental hygiene board. As of November 2009, there are 17 states in the U.S. that have dental hygiene advisory committees for State Boards of Dentistry (which license dental hygienists and dentists) or facilitate some degree of self-regulation for dental hygienists.²

Dental Hygiene Education

The dental hygienist is the primary member of the dental team that focuses on disease prevention. Health promotion, wellness, and risk assessment are key components of the curricula of dental hygiene programs.³ Dental hygiene education programs assess a student's ability to identify the signs and symptoms of disease, recognize and understand the nature of the disease process, synthesize information, identi-

fy the condition/s or disease/s, understand the methods of treatment and management, and apply appropriate methods to arrest disease progression. Dental hygienists are educationally qualified to identify, manage, and evaluate oral health activities and interventions at both the individual and community level.

Dental hygiene education includes an average of 86 credit hours for an associate degree, or 122 credit hours for a baccalaureate degree.⁴ Graduates of dental hygiene associate degree programs far exceed the normal credit hour limits for the degree awarded as defined by higher education institutions. Graduates of associate degree dental hygiene programs have completed nearly three years of academic course work upon graduation. Accredited dental hygiene programs include over 2,700 clock hours of curriculum including over 650 hours of supervised clinical dental hygiene instruction.⁵

The minimal requirements for dental hygiene education are currently primarily defined by the Commission on Dental Accreditation (CODA), *Accreditation Standards for Dental Hygiene Education Programs* and the American Dental Education Association (ADEA) *Competencies for Entry into the Dental Hygiene Profession*.⁶ In addition, the clinical practice of dental hygiene is defined by the ADHA through the *Standards for Clinical Dental Hygiene Practice*.¹

Dental Hygiene Practice

As noted, dental hygiene practice acts vary from state to state and foster a variety of practice and supervisory relationships. Twenty-nine states currently have policy in place to allow patients direct access to services administered by dental hygienists.⁷ Direct access, as conceived by ADHA, enables a dental hygienist to initiate patient care in a setting outside the private dental office, without a dentist present, and without a dentist having previously examined the patient. Direct access facilitates a new entry point into the oral health care system for patients who cannot access care in a private dental office.

There are various manifestations of direct access policy—limited access permit, public health supervision, and collaborative practice are some of the direct access models states have put in

place. Services, care protocol, referral mechanisms, supervisory/collaborative relationships, and educational and experiential requirements for dental hygienists working via direct access differ depending on state practice acts. The common arc of direct access policies among the 29 states is the acknowledgement that dental hygienists are competent in the application of critical thinking skills to assess, diagnose, and plan treatment *within the dental hygiene scope of practice* without a dentist onsite.

In recent years, as links between oral health and total health continues to emerge, the benefits of collaboration among oral health and medical providers on patient outcomes become more apparent.⁸ The movement towards integration of oral health and medical care will continue to shape dental hygiene practice in the future. The trend is evidenced by the passage of legislation in Oregon in 2009 for expanded practice settings for dental hygienists to include offices of midwives and nurse practitioners.

States are increasingly recognizing dental hygiene diagnosis and other components of the dental hygiene process of care in dental hygiene scopes of practice. Colorado defines dental hygiene diagnosis in state statute and recognizes it as part of the dental hygienist's scope. Similarly, Oregon administrative rules acknowledge diagnosis and treatment planning for dental hygiene services as part of the scope of practice for dental hygienists in the state. Nine other states include dental hygiene assessment and/or treatment planning as part of the dental hygiene scope of practice.

Dental Hygiene Process of Care

Dental hygienists utilize the critical thinking model known as the dental hygiene process of care on a daily basis. The purpose of the dental hygiene process of care is to provide a framework through which the individualized needs of the patient can be met. The process defines a method guiding the practitioner in making assessments, sound clinical decisions and judgments based on their identification of the causative or influencing factors of a condition that can be reduced, eliminated, or prevented by the dental hygienist.^{9,10} The five components of the dental hygiene process of care include: as-

assessment, dental hygiene diagnosis, planning, implementation and evaluation.

The dental hygiene diagnosis is a key component of the process and involves assessment of the data collected, consultation with the dentist and other healthcare providers, and informed decision making. The dental hygiene diagnosis and treatment plan are incorporated into the comprehensive treatment plan by the dentist that addresses the complete oral health needs of the patient. The dental hygienist is a licensed professional who is responsible for making informed, evidence-based decisions and is accountable for his/her actions.¹¹ All components of the process of care are interrelated and depend upon ongoing assessments and evaluation of treatment outcomes to determine the need for change in the treatment plan.

Dental Hygiene Diagnosis

A dental hygiene diagnosis is defined as: the identification of an existing or potential oral health problem that a dental hygienist is educationally qualified and licensed to treat; the dental hygiene diagnosis requires analysis of all available assessment data and the use of critical decision making skills in order to reach conclusions about the patient's dental hygiene treatment needs.¹

The definition of diagnosis is "the act of identifying a disease from its signs and symptoms," "a concise technical description," "investigation or analysis of the cause or nature of a condition, situation, or problem," and "a statement or conclusion from such an analysis."¹² Dental hygiene program curricula are designed to provide students with the basic and dental science background to recognize the signs and symptoms of disease and to recognize the cause or nature of the problem. This results in determining a dental hygiene diagnosis within the comprehensive dental diagnosis.

A dental hygienist performs a variety of assessments during the provision of patient care. Information, signs and symptoms from the patient's medical and dental history and the extra- and intraoral assessments provide data to allow the dental hygienist to determine the patient's risk for disease such as oral cancers,

dental caries, and periodontal disease. During the medical history review, the dental hygienist considers the patient's known medical status, current prescription and non-prescription medications, measures their blood pressure, and reviews nutritional risk factors. The dental hygienist then uses critical thinking skills to formulate a dental hygiene treatment plan for the patient. Appropriately addressing the treatment needs of the patient is dependent upon a dental hygienist's ability to identify the conditions and to establish an individualized dental hygiene treatment plan.

For example: A 72-year-old white male presents with brown, soft, crumbling enamel on multiple mandibular teeth at the gingival margin. While taking the medical and dental health history, it is discovered that the patient has xerostomia from his cardiac medications and sucks on sweet candies daily to alleviate dry mouth symptoms. Dental hygiene diagnosis #1: Rampant caries. Dental hygiene diagnosis #2: Xerostomia. Treatment #1: Refer for Class V restorations. Treatment #2: Patient education and prescription recommended: sugarless candies and gums with xylitol and salivary substitute rinses for xerostomia. The dental hygiene diagnosis assesses the need for treatment and recommends appropriate treatment modalities and referrals.

The collaborative relationship between dental hygienist and dentist professionals assures that the comprehensive treatment needs of the patient will be identified, addressed, and evaluated.

The critical elements of dental hygiene diagnosis and treatment planning are essential in the dental hygiene process of care in order to prepare competent licensed healthcare professionals to work effectively in all practice settings where a dental hygienist can provide treatment. Dental hygienists and dentists integrate their respective diagnoses and treatment plans into a single comprehensive plan that requires a full spectrum of professional knowledge, skills and judgments. The collaborative relationship between dental hygienist and dentist professionals assures that the comprehensive treatment needs of the patient will be identified, addressed, and evaluated.

Critical Thinking

The dental hygiene process of care is both a clinical process and a critical thinking process. The dental hygiene process of care refers to higher order thinking, processing, and problem-solving. As licensed healthcare providers, it is imperative to develop skills that allow one to consider, analyze, synthesize, and evaluate data and make knowledge-based assessments and treatment decisions. This knowledge should provide assurances to the patient and other healthcare providers that a dental hygienist carefully assesses, considers, and analyzes data, and that the hygienist is positioned through education and clinical and community experiences, to work competently and effectively with other healthcare providers, particularly the dentist.

Diagnostic thinking or reasoning, while defined as the identification of the source and nature of a disease process, is also one aspect of a problem-solving process. This critical thinking component is an inherent responsibility of any licensed healthcare provider. In the health professions, "a critical thinker is described as an individual who: raises questions and problems, formulating them clearly and precisely; gathers and assesses relevant information; comes to well-reasoned conclusions and then tests them against relevant standards; thinks openly about alternative systems of thought or alternative perspectives, and assesses their assumptions, implications, and practical consequences; and communicates effectively with others in determining solutions to complex problems."¹³ "Further, it has been noted that "Critical thinking and problem-solving, information management, leadership and teamwork, and lifelong learning must be integral for all dental education models."¹⁴

Dental hygienists and dentists work together as team members, and both use critical thinking processes in order to deliver the most comprehensive, most effective and most individualized care addressing the specific needs of each patient.

Licensed healthcare providers are responsible to the patients they serve, to themselves, and to their professional peers to employ the analytical and evaluative skills necessary to make the most informed and appropriate treatment decisions. Effective critical thinking requires intellectual engagement and responsible thinking. Critical thinking facilitates good judgment because "it requires the application of assumptions, knowledge, competence, and the ability to challenge one's own thinking. Critical thinking requires the use of self-correction and monitoring to judge the rationality of thinking."^{15,16} Dental hygienists and dentists work together as team members, and both use critical thinking processes in order to deliver the most comprehensive, most effective and most individualized care addressing the specific needs of each patient.

Summary

Several core beliefs have been defined by the members of the ADHA which guide members' approach to practice.¹⁷ These include that dental hygienists value their education and license, as both qualify them to serve the public. Dental hygienists work interdependently with other health care providers; at the same time, hygienists are licensed providers and are individually responsible for actions and the quality of dental hygiene care they provide.

It is the position of the ADHA that dental hygiene diagnosis is a necessary and intrinsic part of dental hygiene education and practice. In order to adequately prepare graduates for the practice of dental hygiene, as well as to assume any of the professional roles of the dental hygienist, dental hygiene education programs must include theory and practice involving the dental hygiene process of care, inclusive of dental hygiene diagnosis and treatment planning. Dental hygienists employ the dental hygiene process of care on a daily basis. The dental profession has already demonstrated the successful integration of the dental hygiene process of care in dental hygiene education and practice through the establishment of comprehensive treatment plans created by the dental hygienist and dentist working collaboratively as professional colleagues.

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