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Time to Validate the Periodontal Therapist

A traditional career ladder for private practice dental hygienists does not exist at this time. However, those who take the initiative to develop their knowledge base through researching evidence-based treatment trends and fine-tuning their clinical competency will capitalize on an unprecedented opportunity in our profession: to practice as a periodontal therapist. General dentists are now starting to recognize the need for periodontal therapists, much like primary care physicians recognized the need for nurse practitioners 40 years ago.

Born out of the unmet health care needs of Americans, the nursing profession blazed a trail for us when the nurse practitioner model was introduced in 1965, "making health care accessible to a population whose demands and expectations… impose an increasingly heavy burden on the present health care delivery system."[1] Similarly, hygienists are uniquely positioned to assume the role of periodontal therapists in responding to the US Surgeon General's recent "call to arms" to address the "silent epidemic" of periodontal disease in our country. With an estimated 56 million Americans with attachment loss of 3 mm or more, affecting approximately one third of their remaining teeth,[2] we must advance our professional capabilities. Simply put, our time has come.

Step Toward Progress

There are a number of logical reasons why dental hygienists need to progress into the role of periodontal therapists. What factors make attaining this master clinician level (in general practice) an inevitability for the dental hygiene profession?

Factor 1. The epidemiological trends associated with periodontal disease indicate a greater prevalence of early-to-moderate stage disease than previously recognized and an aging population that will continue to place an increasing demand on dental professionals for periodontal services.[3]

Factor 2. Evidence seems to indicate a more conservative therapeutic trend toward nonsurgical treatment of chronic periodontal disease. Researchers now believe that subgingival instrumentation for removal of plaque and calculus, without surgical access, is more effective than previously thought. Furthermore, "clinical success or failure of scaling and root planing may be dependent on a critical mass of residual calculus rather than total elimination."[4]

Factor 3. The shift in etiological theory, particularly the American Academy of Periodontology's (AAP) recognition that periodontal tissue destruction is primarily a result of the host response, provides the missing piece to understanding the pathogenesis of periodontal disease. The adjunctive use of subantimicrobial doses of doxycycline hyclate (Periostat®, CollaGenex Pharmaceticals, Inc) in suppressing the host's overproduction of collagen-destroying enzymes might prove beneficial in patients with increased susceptibility to disease progression.[5]

Factor 4. The use of the locally applied, controlled-release, biodegradable drug delivery system that treats bacterial load, doxycycline hyclate (Atridox®, CollaGenex Pharmaceticals, Inc), holds promise in increasing clinical attachment level.[6]

Factor 5. Technological advancements are providing the armamentarium necessary to test for genetic susceptibility to periodontal disease and the early detection of periodontal disease.[7]

Factor 6. The public has become keenly aware that if they have periodontal disease, they may be at risk for other medical conditions.[8] The emergence of several generations of "health care activists"[9] has spawned careful attention to periodontal health.

Epidemiological Trends

One of the AAP's parameters of care focuses on clinical attachment loss as a gold standard in clinical diagnosis of disease severity: up to 4-mm attachment loss is generally categorized as slight-to-moderate stage disease; greater than 4-mm attachment loss is generally considered advanced disease.[10,11] A 1986 survey conducted by the National Institute of Dental Research found that prevalence in the subsample of 15,000 employed adults indicated that at least 1 site of attachment loss ≥ 2 mm was found in about 50% of 18- to 19-year-old subjects; about 80% of 35- to 39-year-old subjects; 87% of 45- to 49-year-old subjects; and exceeded 90% for those 60 years and older. By contrast, only 8% of studied subjects were found to have at least one area of ≥ 6 mm, which qualified as severe periodontal destruction.[12] These findings seem to demonstrate that we had previously overestimated the prevalence of severe disease and underestimated the prevalence of early-to-moderate–stage periodontal disease. Therefore, it appears that the preponderance of periodontal treatment needs are associated with treating early-to-moderate–stage periodontitis, most cases of which can be treated optimally by nonsurgical treatment rendered by the highly knowledgeable and technically competent dental hygienist who is a master clinician—the periodontal therapist.

By practicing at the level of periodontal therapist, we are *not* attempting to expand our scope of practice or work independently of the dentist. Rather, we are updating and fully utilizing the training and education we received to achieve our full professional potential within our scope of practice. (Table). As an example, hygienist students are trained to identify parafunctional contacts and other occlusal discrepancies that influence the progression and course of an inflammatory periodontal condition. Yet, how many licensed hygienists routinely examine and record these findings? Student hygienists have been trained to interpret radiographs and correlate those findings with clinical data to determine a presumptive diagnosis. Yet, how many practicing hygienists thoroughly review radiographs to look for fuzzy lamina dura and/or areas of triangulation to intercept periodontal disease at its earliest stages? An obvious question begs an answer here. If the things we learned were important enough to include in dental hygiene curriculums and national and regional credentialing exams, should we not expect these competencies to progress to an expert level? My experience is that repetition breeds mastery.

Assuming we accept this challenge and take up this "call to arms," what really distinguishes the role and expectations of the periodontal therapist from those of the conventional dental hygienist? In comparing clinical competencies, professional values, personal priorities, and complexity of roles, a very clear identity of the periodontal therapist will emerge.

Frontiers and Homesteads

In some aspects, the journey from the conventional practice of dental hygiene to the emerging model of periodontal therapist runs parallel to the experiences many frontier homesteaders chronicled during the western expansion. Consider an obstacle these pioneers faced: frontline risks in uncharted territories much like those who are practicing as periodontal therapists may experience in this, as of yet, uncharted ground.

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Table—Comparison of Conventional Dental Hygiene Practice and the Periodontal Therapist Model

	Conventional Dental Hygienist Model	Periodontal Therapist Model
Philosophy of Practice	Clinician subconsciously believes the level of care is dictated by insurance benefits and daily schedules (one-size-fits-all scheduling) and sees no opportunity to practice dental hygiene otherwise. Addiction to patient approval prevents the clinician from practicing according to parameters of care.	Clinician consciously believes that she has an ethical responsibility to promote the client's welfare by using the highest levels of professional knowledge, clinical judgment, and technical skill. Provides a thorough diagnosis, prognosis, and optimal and alternative treatment plan(s), regardless of the client's financial circumstances, encouraging their full participation in treatment decisions and therapeutic goals.
Level of Responsibility	Clinician has little or no responsibility for periodontal oversight of clients on her schedule; periodontal cases that may be identified by either the dentist or hygienist are automatically referred to the periodontist; clinician sees herself as an hourly wage earner with the dentist having the full responsibility for clients.	Clinician has been delegated complete responsibility for developing and implementing nonsurgical periodontal treatment systems which ensure that: goals are aligned with practice philosophy; current standards of care are met; treatment recommendations consider clients' needs and pain control; client self-care is incorporated into treatment; production goals are met. Clients are referred to periodontist when necessary; recare and periodontal maintenance intervals are determined on an individual basis; medical histories and progress records are completely and appropriately documented; system is evaluated to ensure that protocols are updated to remain consistent with evidence-based research.
Acquisition of Knowledge Base	Clinician depends on teachers, sales representatives, and employers for learning; waits for someone else to direct learning and to determine what is important to learn; relies on outdated information; "squeaks" out CE requirements for relicensure.	Clinician believes learning should be self-directed, continuous, and lifelong; understands how to interpret research, its validity, and how to incorporate it into everyday practice; critically appraises the content of CE. Clinician strives to attain her full potential.
Diagnostic Capabilities	Clinician may pass on diagnostic responsibilities by relying on the dentist's diagnosis of periodontal stability; conditioned over time to overlook the clinical manifestations of early-to-moderate–stage periodontitis and hard tissue defects, occlusal discrepancies, and radiographic evidence of caries or bone loss; neglects to perform thorough cancer examinations; seldom performs a comprehensive periodontal examination; does not understand concept of clinical attachment level and its importance in diagnosing periodontal disease or how to measure it; may routinely rely upon periodontal screening and recording (PSR) to detect periodontal disease; does not interview patient to determine risk factors for periodontal disease or caries susceptibility; point of treatment intervention is delayed until patient exhibits clinical or radiographic evidence of severe-stage disease (pocket depth >6 mm, attachment loss >4 mm, grade II-III furcation involvement, class II-III mobility and vertical bone loss).	Clinician recognizes even the most subtle or slight deviation from normal or less-than-perfect conditions; assesses medical status including risk for periodontal disease and need for prophylactic premedication; performs extra/intraoral cancer examination, hard tissue examination to evaluate the integrity of restoration-to-tissues interfaces, periodontal examination which includes gingival assessment, probing depth, loss of attachment, bleeding on probing, suppuration, tooth mobility, furcation involvement, and measurement of attached gingiva; understands when to conduct microbiological/host response monitoring; recognizes occlusal discrepancies, parafunctional contacts, traumatic occlusion, and cases that need to be referred for equilibration; evaluates radiographs in relationship to clinical findings; recognizes when a case is beyond the scope of practice in providing nonsurgical treatment, ie, crown lengthening procedures, vertical defects, mucogingival conditions, aggressive forms of periodontitis, manifestations of systemic diseases and mucocutaneous lesions, and bonafide refractory cases; point of treatment intervention is at the first signs of periodontal disease and/or disease susceptibility.
Treatment Planning Expertise	Clinician may not believe she has responsibility for developing the treatment plan and has no basis for determining treatment recommendations except "what insurance may cover" and what the clinician may have learned in school; makes treatment recommendations which may be outdated, ineffective, or even harmful; neglects to address smoking or other risk factors. Clinician "diagnoses pocketbooks instead of mouths."	Clinician provides prognosis for outcomes for which the hygienist is responsible; follows scientifically valid algorithms which provide a systematic approach for determining when to recommend SRP and adjunctive therapies, enzyme suppression, microbiological testing, nutritional counseling, and smoking cessation; determines recare frequency based on disease susceptibility and periodontal stability. Clinician sees herself as a cotherapist with dentist, making decisions regarding clients' needs and plans periodontal treatment and dental hygiene care.
Case Presentation Ability	Clinician has an inadequate base of current scientific knowledge, which causes a significant barrier to effective case presentation; clinician's inability to communicate relevant scientific information makes it difficult for clients to understand the extent of their disease or place confidence in their treating clinician. Clinician sabotages presentation by making assumptions about individuals' values, attitudes, or concerns that are inaccurate; often underestimates the level of understanding a client has about periodontal disease or the severity of a condition; underestimates the need-to-know mentality of today's health care consumer; fails to effectively communicate the efficacy of the proposed treatment or the idea that the benefit outweighs the cost; fails to communicate the hierarchy of treatment. Periodontal care must precede elective dentistry; fails to provide alternative treatment plans or engages in "hard sale" presentation techniques; clinician demonstrates little or no BLT (believability, likeability, trust).	Clinician has a storehouse of current scientific knowledge that is readily customized and enthusiastically communicated to clients, allowing them to have a thorough understanding of the progression of periodontal disease and the extent of their disease. The clinician's professional case presentation style inspires BLT, instilling confidence in technical capabilities. Clinician empowers the client to make the decision regarding treatment by fully explaining optimal and alternative treatments, their cost/benefit, and the importance of stopping the progression of the disease before proceeding with elective dentistry. Clinician does not allow preconceived assumptions regarding the client's financial ability, values, attitudes, or treatment expectations to prejudice or manipulate what the clinician believes is the optimal treatment and presenting it as such to the client. Clinician monitors case presentation and case acceptance rates; asks peers to critique presentation content and style.
Technical Skills	Clinician assumes she is proficient in root planing and is unwilling to have technical skills evaluated via peer review; does not have an understanding of how to angle a probe to ensure that interproximal pockets are correctly measured; rarely uses explorer to check for root roughness or residual calculus and often leaves calculus deposits in excess of critical mass; does not sharpen instruments on a routine basis and often mistakes the cutting edge of many curets. Instruments for scaling and root planing/debridement are not reserved for periodontal cases; clinician has limited knowledge of or experience with the most current power-driven scaling devices; clinician does not provide radiographs that are of sufficient diagnostic quality and often overlooks the need for a full-mouth series of x-rays; has little or no experience in subgingivally placing a controlled-release, biodegradable antimicrobial and/or periodontal dressing.	Clinician has a thorough knowledge of the anatomical, histiopathologic, and physiologic characteristics of teeth and supporting tissues[13]; has developed advanced root instrumentation skills mastering adaptation of instruments to tooth surfaces; maintains separate instrument armamentarium for SRP, which includes furcation instruments, files, and implant instruments as needed; routinely and systematically sharpens instruments after use on each client; is current in knowledge and competent in the use of power-driven scaling devices and precision thin inserts adapted for various tooth surfaces; depends on a methodical approach to thorough SRP; effectively uses explorer to detect roughness or residual calculus; properly probes; has perfected radiology techniques to ensure diagnostic-quality radiographs; is proficient in obtaining subgingival samples for microbial cultures and DNA analysis; is proficient in performing subgingival antimicrobial irrigation and/or subgingivally placing a controlled-release, biodegradable antimicrobial and/or periodontal dressing.
Level of Professional Relationship	Clinician relates dependently by relying on office manager or employer to take responsibility, direct activities, or rectify problems. Clinician does not enhance professional competencies, which compromises how the dentist-employer may view his/her expertise in advanced periodontal therapeutics; may not welcome or even be intimidated by the concept of peer review; is more comfortable in a subordinate role.	Clinician relates interdependently by collaborating with dentist, team members, and other health professionals to create a solution to a problem.[14] Clinician works in an office with a dual-practitioner approach; exchanges knowledge in collaboration with dentist and other professionals to determine desired clinical end points of treatment and client care; supports and welcomes peer review for quality assurance.
Business Orientation	Clinician largely relies on employer, office manager, or hygiene coordinator to make sure the hygiene department is scheduled for production, takes little responsibility for broken appointments, trying to fill last-minute cancellations; has little knowledge of expenses associated with the hygiene department or rate of average production; takes little part in marketing the practice; clinician is almost totally detached from the business side of the practice; has little understanding of management software.	Clinician oversees appointment planning including block scheduling; tracks personal production, collections, and various expenses related to the hygiene department; monitors broken appointments, late cancellations, routine recare and periodontal maintenance recare efficiency rates and professional product line sales and inventory; develops narratives for insurance reports; corresponds with patients regarding periodontal maintenance reminders, etc; proactively markets practice both internally and externally; audits patient records to determine accuracy of documentation and incomplete treatment plans or completion of prescribed treatment; uses management software with ease.
Exposure to Legal Risk and Ethical Concerns	Clinician's transfer of scientific information to the client is inadequate, violating the client's right to full disclosure of information relevant to informed decision and breeching the ADHA Code of Ethics.[15] Failure to diagnose early-stage periodontal disease exposes the clinician to clients' claims that they were not provided with the diagnosis and treatment alternatives before the disease reached an advanced stage, one of the most common dental malpractice claims.[16]	Clinician acts as a "funnel" in passing onto clients scientifically sound and personally relevant information that will help them understand the extent of their disease and the benefits and associated costs of each alternative treatment. Clinician builds safeguards into clinical protocols and chart audits to ensure that adults receive comprehensive periodontal evaluations once a year, and spot probed during interval visits. Written informed consent, or in the least documented verbal consent, is routinely obtained in addition to waiver for treatment.[17]
Periodontal Clientele	<10% of adults	≥65% of adults
Production Potential	$100-$125/hour (Ranges are a function of percentage of managed care vs traditional client mix.)	$275-$300/hour (Ranges are a function of percentage of managed care vs traditional client base.)
Compensation Potential	$25-$35/hour total compensation	$55-$65/hour total compensation

Yet their persistence brought great reward, both personal and communal. So will ours. Persistence in pressing on to the furthermost limits of knowledge and scope of dental hygiene practice will reap similar dividends: an increase in the quantity and quality of comprehensive client care, growth in the prosperity of dental practices, and realization of a level of professional fulfillment that has alluded us in the past. My experience has been that those dentists who embrace optimal utilization of the periodontal therapist to provide more comprehensive care to clients are generally recognized for their practice excellence and significantly higher revenue streams. They are also very willing to compensate periodontal therapists at a significantly higher level. When a periodontal therapist can sustain average daily production of $2,200 (and greater) yielding minimum net profits of 35%, progressive-thinking dentists take little issue with paying their salaries in the range of $500 per day.

The size of the pioneers' vision was enormous and only surpassed by their storehouses of energy and dedication. Likewise, my vision for our profession seems enormous, and parallel energy and dedication will be requisite in taking the initiatives that will catapult us to the master clinician level that defines the periodontal therapist. **COH**

References

1. Extending the scope of nursing practice. A report of the Secretary's Committee to study extended roles for nurses. *JAMA*. 1972; 220(9):1231-1235.
2. Offenbacher S. Periodontal diseases: pathogenesis. *Ann Periodontol*. 1996;1(1):821-878.
3. US Dept of Health and Human Services, National Center for Health Statistics. Third National Health and Nutrition Examination Survey, 1988-1994. Hyattsville, Md: Centers for Disease Control, 1997. Public Use Data File No. 7-0627.
4. Cobb CM. Non-surgical pocket therapy: mechanical. *Ann Periondontol*. 1996;1(1): 443-490.
5. Modulation of the host response in periodontal therapy. *J Periodontol*. 2002;73(4):460-470.
6. Garrett S, Johnson L, Drisko CH, et al. Two multi-center studies evaluating locally delivered doxycycline hyclate, placebo control, oral hygiene, and scaling and root planing in the treatment of periodontitis. *J Periodontol*. 1999;70(5):490-503.
7. PST Test Patient Collection Kit, Kimbell Genetics Inc. www.kimballgenetics.com; BANA Test, OraTec Corp. www.oratec.net, Diamond Probe, Diamond General Development Corporation, www.perio 2000.com.
8. Scannapieco FA. Position paper of The American Academy of Periodontology: periodontal disease as a potential risk factor for systemic diseases. *J Periodontol*. 1998;69(7): 841-850.
9. Herzlinger RE. *Market-Driven Health Care: Who Wins, Who Loses in the Transformation of America's Largest Service Industry*. Cambridge, Perseus Publishing, 1997; 47-84.
10. Parameter on chronic periodontitis with slight to moderate loss of periodontal support. American Academy of Periodontology. *J Periodontol*. 2000;71(5 Suppl):853-855.
11. Parameter on chronic periodontitis with advanced loss of periodontal support. American Academy of Periodontology. *J Periodontol*. 2000;71(5 Suppl):856-858.
12. Miller AJ, Brunelle JA, Carlos JP, et al. *Oral Health of United States Adults*. Bethesda, Md: National Institute of Dental Research; 1987. NIH Publication No. 97-2868.
13. Wilkins EM. *Clinical Practice of the Dental Hygienist*, 8th ed. Philadelphia, Lippincott, Williams and Wilkins, 1999; 116.
14. Hodges K. *Concepts in Nonsurgical Periodontal Therapy*. Albany, Delmar Learning, 1997; 481.
15. Jahn C. A guide to better decisions in dental hygiene care: understanding the evidence-based approach and its benefits in periodontal care. *J Prac Hyg*. 2000;May/June: 19-23.
16. Brunick A, Driscoll RE 3rd. Legal considerations for periodontal treatment. *J Dent Hyg*. 1991;65(6):274-276.
17. Ummel E. Adverse treatment outcomes and the standard of care. *SAFECO Insurance Companies Dental Claims and Insurance News*. 1996;January/February.

Meet Your Professional Challenge Head On

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the state and local levels for involvement. These opportunities can serve as a stepping stone. Hygienists need to challenge each other and share information and opportunities.

Go Online

The newest frontier in dental hygiene is the Internet. There are various sites and groups that can help facilitate the exchange of information and ideas. I know of 2 hygienists who met through the Internet and have developed a very satisfying professional mentoring relationship. They live in different states, but if it weren't for this dental hygiene site, they'd probably have never met. Through a common career, they were able to connect and exchange ideas.

The key is to share information and motivate one another to a higher standard, offering encouragement to one another that the possibilities and opportunities are worth reaching for. We want to take the "dream" and make it a reality.

Some sites to access are rdh@yahoogroups.com and Monster.com, which have areas titled Healthcare news. rdh@yahoogroups.com was originally started as a site for students to converse and exchange information. In addition to students, the site has grown to have more than 900 registered dental hygienists nationwide.

Reach Out to Others

The next time you are feeling frustrated and need a way to get "pumped up" about your career, try connecting with fellow hygienists in some way. You'll be surprised that you are not alone in some of your experiences—positive or negative.

Perhaps another hygienist can help you look at a situation differently, and lead you into action. Conversely, there might be a worthy attribute you can share. Hygienists must seek to remove themselves from isolation and connect with colleagues. In the process, we'll be more energized and become better dental health practitioners. **COH**

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