

Will Today's Dental Public Health Workforce Meet Tomorrow's Needs?

David A. Nash
National Oral Health Conference
Denver, Colorado
April 30, 2007

Introduction

With the prior knowledge and approval of the planning committee of this session, I will deal with our topic in a somewhat unconventional manner, one different than your program suggests.

Responding to the question of the moment, "*Will today's dental public health workforce meet tomorrow's needs?*" requires significant assumptions be made as to the nature of tomorrow's needs, and by implication--goals for the future.

The poet Goethe wisely observed, "*He who is wise begins with the child.*" Given my orientation as a pediatric dentist, as well as time constraints, I will only address the question from the perspective of meeting the needs of our children.

We all acknowledge that our ultimate goal is prevention. We want our children to reach adulthood without having experienced the ravages of oral disease. However, it would be naive to believe that dental disease in children can be completely prevented. Therefore, a further goal must be ensuring that children who do experience oral disease are treated effectively and efficiently. The dental public health workforce needed to achieve these goals is significant. The answer to our question is an emphatic "*No!*" Our dental public health workforce does not even meet *today's* needs, and we are certainly not in a position to meet *tomorrow's*.

(Re)defining Public Health

The French philosopher Voltaire declared, "*If you wish to converse with me, define your terms.*" I am going to define the dental public health workforce differently than it is traditionally defined, in order to advance my argument. While a specialist in pediatric dentistry, I am a public health dentist and a member of the dental public health workforce. This is true even though I have never earned a single academic credit in a public health course, nor practiced in a traditional public health setting. It is my perspective that all professionals in dentistry are members of the dental public health workforce.

Classically, sociologists have characterized a learned profession as one that exists to achieve socially defined goals, rather than the self-interest of its members. Professions exist, and are granted a virtual monopoly to practice by society, on the basis of ‘professing,’ that is, promising or vowing to make the public’s interest primary.

The late Talcott Parsons, of Harvard University, considered to have been the ‘dean’ of American sociologists, differentiated professions from businesses. *“The core criterion of a full-fledged profession is that it must have means of ensuring that its competencies are put to socially responsible uses...Professionals are not capitalists, and they are certainly not independent proprietors or members of proprietary groups.”*

Historically, dentistry as a profession has focused on serving the oral health needs of patients and society, with the financial gain derived being a natural and appropriate consequence of the service provided. Today, increasing numbers of dentists are coming to understand themselves to be practicing in the marketplace of health care; competing for patients; treating patients with the primary motivation of earning a significant profit; in short, functioning within the context and culture of a business enterprise, rather than a profession dedicated to the oral health of the public; members of the public health workforce.

Rashi Fein, the distinguished Harvard health economist, expresses distress regarding the transformations occurring: *“A new language has infected the culture of health care. It is a language of the marketplace, of the tradesman, and of the cost accountant. It is a language that depersonalizes both patients and health professionals, and treats health care as just another commodity. It is a language that is dangerous.”*

Arnold Relman, long-time distinguished editor of the New England Journal of Medicine put it bluntly, *“Health care is not a business.”*

Dentistry is a public good--a public utility--and *all* dentists and dental hygienists are members of the dental public health workforce.

The Multi-faceted Nature of the Problem

The problem we face in achieving the goal of oral health for all our nation’s children is multifaceted and includes: the prevalence and pattern of dental caries in children; the general lack of care for the children most in need; and the barriers to accessing care created by the attitudes of dentists, their inadequate education, and their mal-distribution.

As is well-known, dental caries is a “silent epidemic” in America’s children. Additionally, there are profound and significant disparities in oral health among our children. Children most in need of care are not receiving care. Children, our society’s future, and our most vulnerable population, are being neglected. I am not going to rehearse the data that support these statements—they are well-known. Regrettably, our dental workforce and its leadership, the American Dental Association, do not understand

themselves as members of the dental public health workforce. In general, they understand themselves to be private entrepreneurs, plying their trade, with little accountability for the general public's oral health.

The attitude of dentists in caring for our nation's children most in need of care is not positive. Less than 25% of America's dentists will accept children in their practices whose care is publicly insured by Medicaid or S-CHIP. That is a generous number, as the percentage of those who participate to any significant degree is closer to 10 percent--one dentist in ten. Thus we have individuals who have vowed as professionals to care for the public's oral health, and have been granted a virtual monopoly by society to practice dentistry, generally unwilling to treat the children who that same society is willing to pay them to treat. And, the overwhelming majority of these dentists have been educated in public supported universities where society has invested major resources in their education. A National Council of State Legislatures research report in 2002 found community leaders in the public sector making very disparaging comments about the arrogance, uncooperativeness, and self-centeredness of dentists. In a recent on-line survey, to which 10,000 people responded, 66% said dentists should be required to accept Medicaid children, absent any increase in fees.

Increasingly, fewer general dentists are treating children, as children's dentistry in a general practice is not economically as profitable as implants, fixed prosthodontics, and esthetic dentistry.

Our dental schools struggle to find faculty members for departments of pediatric dentistry, and dental students' experience treating children has declined significantly, resulting in many graduates with questionable competence to even treat children.

Dentists are locating in upper middle class suburbs, away from rural and inner city areas where many of the children who require care live. The number of federally designated shortage areas doubled in less than ten years. Pediatric dentists are not the solution as there are only 4,000 in the country; this compared to 60,000 pediatricians, who provide much of the primary health care for children.

An International 'Best Practices' Solution to the Problem

As the old saw goes, "*if we keep doing what we are doing we will keep getting what we got.*" It is time to change! And, we have a successful model, practiced internationally--a 'best practices' solution to emulate--as we augment our dental public health workforce to both prevent oral disease in our children, and to care for it when preventive efforts fail. The model was developed in New Zealand in 1921, and has since spread to 53 countries of the world. It is the model of the *school dental nurse*, who since the 1980s has been referred to as a *dental therapist*, and more recently in some countries, as an *oral health therapist*.

In New Zealand, there are 610 registered dental therapists caring for the country's 850,000 children. Almost 98% of New Zealand's children are cared for by dental therapists who are assigned to every elementary and middle school in New Zealand. A recent report of the oral health of New Zealand's school children documented that at the end of a given school year essentially none of New Zealand's children in the School Dental Service have active dental caries. Would that could be said about the children in the United States! The financial investment New Zealand makes in the oral health of its children is economically prudent. The country has essentially the same number of children as my home state of Kentucky. Yet, New Zealand spends less in a given year in caring for all of its children than we spend in Kentucky on the children in our Medicaid program alone.

Dental therapy spread from New Zealand to Australia and currently there are over 1,500 dental therapists practicing there. A recent report indicated that the majority of dental care for children in Australia is provided by dental therapists.

Malaysia employs dental therapists to provide government-supported dental care for its three million school-age children through a network of 2,000 public dental clinics specifically for children. All dental care for children in Malaysia is by dental therapists.

Dental therapists have practiced with Health Canada, Canada's Ministry of Health, since 1972. There are 300 dental therapists practicing in Canada, with approximately 100 employed by Health Canada to treat Canada's First Nation citizens. Most of the remainder practice in Saskatchewan, where dental therapists are recognized as full members of the dental team, with many practicing in dental offices, complementing the work of dentists, in much the same manner hygienists practice in the United States.

Currently, there are 700 dental therapists practicing in Great Britain in a variety of dental health care settings. The UK recently expanded the training opportunities for dental therapists and now graduates over 200 dental therapists each year from its 15 programs, all but one of which are located in dental schools.

Recently, The Netherlands adopted oral health therapists as a major dimension of its dental delivery system, and are now matriculating 300 a year in its vocational schools. At the same time the number of dentists educated is being reduced by 20%. The rationale: in the future, significant aspects of basic preventive and restorative care will be provided by these oral health therapists, with dentists performing more complex procedures and treating medically compromised patients. The new Dutch policy reduces the absolute numbers of dentists to control the costs of dental education, and develops oral health therapists to both improve access to care, as well as reduce the costs of care.

Throughout the world dental therapy is growing in popularity, primarily because of a dental workforce unable to provide access to preventive and rehabilitative care for all citizens.

Training in dental therapy has typically been accomplished in two academic years, and continues to be the model in most countries. However, New Zealand, Australia, Great Britain, and now The Netherlands, have recently integrated their dental hygiene and dental therapy programs into a three academic year curriculum to train individuals in both hygiene and therapy.

Numerous studies have been accomplished throughout the world evaluating the quality of care dental therapists provide children, including diagnostic, preventive, and restorative care. The results consistently confirm that dental therapists provide an equivalent quality of care as dentists.

Adding Dental Therapists to Our Dental Public Health Workforce

Three models are possible for training dental therapists in the United States. Although some countries are beginning to permit dental therapists to treat adults; generally they treat children. I believe dental therapists in this country should focus on treating children. Therefore, I will subsequently employ the term *pediatric oral health therapists*.

The classic model for the world has been a two academic year training program similar to our current two year dental hygiene training programs. Two year therapy curricula could be offered alongside our dental hygiene programs, sharing the same facilities and many of the courses in the basic biomedical and clinical sciences.

Another option would be to integrate training of *pediatric oral health therapists* with that of dental hygienists in a three year program, as is beginning to happen globally, so that on graduation the dually-trained person could practice one or the other, or both.

Given the expectation that many current dental hygienists would desire to expand their skills to include *pediatric oral health therapy*, a third training option is an intensive participatory continuing education program. It is my view that such a program could be accomplished in six months. A study at the Forsyth Institute in the 1970s documented this time frame as more than reasonable.

Establishing training programs in *pediatric oral health therapy* must not reduce the number of individuals trained in traditional dental hygiene. Dental hygienists are needed in their current role and are in high demand.

While I am a strong supporter of dental hygienists expanding their scope of practice to include *pediatric oral health therapy*, I am opposed to the “advanced dental hygiene practice” model being considered by the American Dental Hygienists’ Association. A six-year path that requires both a baccalaureate and master’s degree is simply not necessary nor justified.

Where and under what circumstances might a *pediatric oral health therapist* practice? At least four possibilities exist. To effectively address the access problem practitioners must

go to where children are located. As in New Zealand, the most logical place to capture this audience is in the school system. As Jim Dunning stated over 30 years ago, "*any large-scale incremental care plan for children, if it is to succeed, must be brought to them in their schools.*" It is reasonable to deploy *pediatric oral health therapists* in mobile vans to provide care to all Medical and S-CHIP eligible children in an elementary school; moving through the academic year from one school to another. Such a program, begun in an incremental manner with the youngest children, with the least carious experience and the greatest potential for implementation of preventive care, would seem to be a cost effective way of managing the oral health needs of our poorest and neediest children. In New Zealand, the school-based clinic is a '*dental home*,' not only for the children in school, but also for the preschool children in the neighborhood or district. The New Zealand school dental therapist is involved in education and preventive for parents and children from birth, an essential approach if we are to address the problem of early childhood caries.

Certainly all public health clinics would be appropriate places for *pediatric oral health therapists* to serve.

Another potential environment for *pediatric oral health therapists* is in dental offices, as exists in Saskatchewan. Therapists could work under the supervision of a dentist, and serve as a dentist-extender for children's primary care, in much the same manner that a dental hygienist serves in such a role for adult periodontal care. The *division of labor principle* of organizational management research documents that procedures should be performed by the least costly individual in an organization who is able to effectively and competently perform the activity. It is neither reasonable, nor in the interest of the oral health of the public, for dentists to perform basic preventive and restorative procedures for children when a *pediatric oral health therapist* can do so just as effectively. Nonetheless, dentists are obsessed with the fear of 'irreversibility.' They cling to the belief that cutting tooth structure is paradigmatically different than scaling teeth. Such is a boundary never to be crossed by others. As evidence indicates, it is a cultural tradition - not a justifiable belief. It would be in dentistry's economic and professional self-interest to develop and deploy *pediatric oral health therapists* in our nation's dental offices—and in the best interests of our children.

A final potential environment for *pediatric oral health therapists* is in the offices of America's pediatricians. The majority of children are seen regularly by the nation's 60,000 pediatricians. In fact, the typical infant/child has had 12 visits to the pediatrician by age three; providing multiple opportunities for early intervention to effect preventive and therapeutic oral health care. Given the relative income levels between pediatricians and dentists there are significant economic incentives for pediatricians to expand their scope of practice and retain *pediatric oral health therapists* to work in their offices under their supervision. Medical and dental practice acts in a significant number of states would permit them to do so.

Conclusion

The experience of other countries of the world has much to teach us. The dental public health workforce in our country, however you define it, is grossly inadequate to provide access to optimum oral health care for America's children. It is inadequate in the current reality, and will become more so in the future.

The professional dental public health community, as gathered here in Denver this week, is the primary spokesperson for the underserved children of America. The AAPHD and AAPH have already endorsed resolutions supporting the introduction of dental therapy in Alaska. Given the magnitude of the problem one would expect that the American Dental Association would be a strong advocate for innovative change to ensure access to care for America's children. Unfortunately, the ADA has become a membership-driven organization focusing on the business interests of us members. Seemingly, it has lost sight of the traditional role of a professional organization of placing the interest of the public above the interest of the organization's members. I have been an active member of the ADA since 1964--43 years--and have watched its devolution to essentially a trade association. Certainly the ADA voices support for access to care, but words become hollow in view of behaviors exhibited. My ADA's heavy-handed and disingenuous attempt to stop the introduction of dental therapists in Alaska, to care for remote Native Alaskan villagers, calls into question ADA's commitment to access to care for all of our nations' children.

The 'silent epidemic' of dental caries is no longer silent. It is screaming at us: "*Do something!*" The tragic and unnecessary death young Deamonte Driver from an infected tooth calls out to us: "*Do something!*"

Today we need thoughtful, committed—yes, and courageous leadership from members of the professional dental public health community. When faced with injustices in their societies, Mahatma Gandhi, Nelson Mandela, and Martin Luther King "*did something*;" they were distinguished by their moral commitment and leadership. They raised their voices in protest, and change resulted. I challenge you to find your voice, to raise it loudly, and to speak out boldly whenever, wherever, and with whomever you can; to distinguish yourself by your moral commitment--to speak *justice to power!* Educate the policy leaders in our states and nation to a more effective and less expensive way to ensure oral health care for our children, and advocate for expanding our dental public health workforce by including *pediatric oral health therapists*. It is time for us to leave the comfort of our offices and clinics and effectively to 'march in the streets' until justice is done for our children. "Advance Access—Take Action." (The Conference theme) Let us not be content until all of America's children have access to the oral health care they deserve. Justice demands that we do no less! Our disadvantaged children cry out to us: "*Do Something...please, do something*"