Doctor, TIC comes to you through the courtesy of your Ticonium Laboratory.

An award-winning dental journal devoted to the dental team — doctor, hygienist, assistant, and laboratory.

A SALUTE TO
THE AMERICAN
DENTAL TEAM
"Hello, Grandma? Would you like to make a bid on an upper left incisor before it goes to the Tooth Fairy for 50 cents?"

"I don't have to be carnivorous, you know."

"Brush, kid. I can't stand a rematch."

"McNamara's Candy Store . . . my window of vulnerability."

Dentistry is of growing importance to America and to Americans. Approximately one-half million people are directly or indirectly involved in providing oral health care to this nation—and the number is increasing.

More and more Americans are taking care of their teeth. In 1971, 47% of all Americans had made one or more visits to their dentists. The per capita visit rate was 1.5. By contrast, in 1981, about half of all Americans—more than 110 million of them—made a trip to a dentist. The per capita visit rate grew to 1.7.

A generation ago, in 1950, Americans spent $1 billion on dental care. By 1990, it is forecast, they will be spending $42 billion.

The American dental team has many faces.
At the core is the dentist—129,000 dentists are actively engaged in their profession. They are aided and supported by: 40,000 dental hygienists, 225,000 dental assistants, plus thousands of non-dental staff, 35,000 dental laboratory personnel, 10,000 of whom are certified dental technicians. 18,000 employ manufacturers and suppliers of dental equipment. The numbers engaged in different aspects of oral health care is growing at a rapid rate.

For the period of 1971 to 1981, total employment—supervisory and nonsupervisory—in offices of dentists increased by 93%, according to the Bureau of Labor Statistics.

During this period, the number of dentists increased by 23%. The forecast for the future, contained in an evaluation of the "National Health Expenditure Growth in the 1980s" prepared by Mark S. Freeland and Carol Ellen Schandler,* is likewise bright. Their analysis forecasts that non-dentist staff—clerical, dental auxiliaries and others—is increasing at a faster rate than the number of dentists, while the number of dentists is growing at about the same rate as dental visits.

The dental office is the primary link with the American public. But supporting it is a vast network of professionals, educators, organizations and individuals, each with an important role.


ORGANIZED DENTISTRY

Professional organizations begin at the grass roots or local level and rise to national and international associations, which involve practitioners in the most advanced of dental developments. They provide a professional and social alliance that is dedicated to a singular goal: Better and more effective oral health standards. They focus on education—preparation and sustaining knowledge; research, continual and continuing in search of new and better ways to care for patients; and service, spanning the wide and diverse facets of oral health in the world today.

Today a productive network of professional organizations, associations, academies, schools and other institutions brings together every phase and activity of dentistry. That matrix of organization extends across the nation and beyond, an effective interrelating of national, regional, state, county, city and international ties whose common bond is the growth of the profession wherever it is practiced.

Over 500 such organizations and institutions serve effectively the estimated half-million members of the American dental team in the nation today—dentists, oral hygienists, dental assistants and dental laboratory technicians—and thus the oral health of the national community as well.

DENTAL LITERATURE/EDUCATION

In addition to the steady annual publication of scientific text and other books on dentistry by leading publishers, the profession is served by over 500 dental periodicals published by dental, dental hygiene, dental assistant and dental laboratory associations, in addition to the professional and social alliances. They focus on education by instituting the requirement for a degree in dental technology—or a specific equivalency—for the dental laboratory industry. The changes and improvements in the CDT testing program are representative of this overall continuing development.

Certiﬁed Dental Technician Program Celebrates 25th Anniversary

by Sandra C. Stewart

1983 marks another anniversary in dentistry: the 25th year for the Certified Dental Technician (CDT) program. This is a laudable milestone because it celebrates the success of a conscious, dedicated, long-term effort on the part of men, women and organizations. The CDT program is the realization of an ideal: to upgrade the dental laboratory technician through recognition and continuing education—and thereby offer a meaningful service to the dental profession and the dental laboratory industry.

How does this matter in the dental office? Well, we know that 90% of all dental offices use the services of a commercial dental laboratory at some time or another; and survey reports from the late 1970s tell us that laboratory charges represent, on the average, 20% of the operating expenses of the dental office. The laboratory, then, should be viewed as significant both in the operatory and on the ledger.

In selecting the laboratory to work with, the dentist has his or her own personal priority requirements. There are plenty of laboratories to choose from. But regardless of the government agency or the dentist uses in selecting a laboratory, there is one absolute and perpetual truth confronting him or her (and their patients): when the dental restoration is delivered to the dental office, what is received will be a direct reflection of the skill and knowledge of the individual dental technician responsible for its fabrication. This is the culmination of the technician's education, experience, care and ability.

Assessment of the skill and knowledge of the individual technician can be a very personal, subjective kind of thing. But there is one hallmark of a master technician that can be objectively determined and identified: this is the Certified Dental Technician credential—the CDT. The CDT program is a voluntary, nationwide undertaking. It was initiated 25 years ago by cooperative action of the American Dental Association and the National Association of Dental Laboratories (NADL). Today it is administered by an independent trust established by NADL, the National Board for Certification in Dental Laboratory Technology (NBC). There are 11,000 technicians certified, with as many as 1,000 taking the certification examinations every year.

To understand why the CDT program's 25th anniversary is a celebration rather than a mere observance in the laboratory industry, some then-and-now comparisons may be useful. In 1958, when the first CDT exam was written with the first CDT exam given in Boston that October—technicians were trained primarily on-the-job—often in a haphazard fashion by self-educated artisans reluctant to share their "secrets." Opportunities for more formal training were extremely rare. There was very little technical literature published for the technician.

By contrast, today there are 58 schools offering accredited two-year courses of study in dental technology; they graduate more than 800 students per year. Technical literature for the technician has literally mushroomed in recent years— including textbooks and many periodicals.

The CDT program has kept pace with—and, in many cases, has fostered and abetted—the development of the dental laboratory industry. The changes and improvements in the CDT testing program are representative of this overall continuing development.

Candidates were required to take specialty tests also, and could select tests in complete dentures, partial dentures, crown and bridge, ceramics and/or orthodontics. In 1974 the NBC gave formal recognition to the graduates of the Commission-accredited dental technology education programs by making a portion of the written certification test available to the graduating students as a preliminary step toward certification.

In 1976, a major advance in CDT testing was made by the addition of on-site proctored practical examinations. And in 1982, the CDT program entered into a full partnership with formal dental technology education by instituting the requirement for a degree in dental technology—or a specific equivalency—for all new CDT candidates.

We must remember this about the Certified Dental Technician: he or she has documented education and experience to qualify for the certification examination; and—because this is voluntary—has demonstrated both practical and theoretical competence through thorough examination; and—because this program is voluntary but requires a significant investment of the technician's time and effort—the Certified Dental Technician has exhibited both pride and confidence in his or her skill and knowledge. And that's worth celebrating.
The Growth Years

By the close of WWII, commercial dental laboratories could be found in practically any city in the United States with a population of more than 25,000. Nevertheless, the industry still had not really established itself because up to 90% of dental prosthetic work was still being accomplished in the dental office. But then came progressive growth years, and by 1960, approximately 980 of the industry was being sent out to commercial dental laboratories. At the present time the figure is estimated at about 93%. The years after World War II were particularly important in the growth and progress of the industry. Many military trained dental technicians utilized this training in civilian life, and the number of commercial laboratories more than doubled.

Another post-World War II phenomenon was the strong tendency of many laboratories to specialize. While today there are still large numbers of general dental laboratories capable of doing any type of prosthetic work, more than half of today’s laboratories specialize in dentures, or crown and bridge, or ceramics, or even in making castings for other dental laboratories.

Organizations

There are numerous organizations working today to assure that the present and future needs of the industry are met. These include the National Association of Dental Laboratories; the National Board for Certification of Dental Laboratories; and the Dental Laboratory Conference.

The Dental Laboratory Conference was founded in 1942. It is based in Philadelphia and has more than 100 U.S. and international members. The DLC concentrates on questions of technical/production needs of the larger commercial dental laboratory.

The National Association of Dental Laboratories (NADL) is generally recognized as the spokesman for the industry with the dental profession, the dental manufacturing industry and with various government agencies. NADL was founded in 1951 and has more than 3,200 member laboratories. It was NADL that created the NBCDL in 1958 with strong cooperation from the American Dental Association and the NBCLD in 1979. As set forth in its incorporation documents, NADL’s purposes include:

1. To uphold and advance the dignity, honor and efficiency of those engaged in the operation of dental laboratories, to advance their standards of service to the dental profession, and to establish cooperation among its members as follows:
2. By promoting the economic social and cultural interests of dental laboratory operators and technicians, by promoting high standards of integrity, honor and courtesy in their relations among each other and with the members of the dental profession and all allied branches of dentistry, by disseminating technical knowledge and information among the members of the industry and rendering aid in the development of their art and craftsmanship, and by assisting members in the solution of their business and technical problems ——
3. By encouraging strict adherence and compliance with all laws relating to the regulation of the technology and to promote the best interests of the public health and welfare.

The Association accomplished these objectives in a number of ways: NADL maintains continuous liaison with the dental profession, dental manufacturers and associates, sponsors group insurance programs; engages in numerous educational, training and personnel projects and programs; and provides business data to and sponsors management seminars for its members. NADL also publishes several publications, including the NADL Journal and the NBCDL News.

The National Board for Certification (NBC) became a reality in 1958. Its purposes are to (1) identify and bring deserved recognition to the highly qualified, ethical dental technicians; (2) provide Certified Dental Technicians (CDT’s) with continuing advanced educational opportunities; and (3) raise the overall technical and ethical performance standards of the industry and craft.

Today, 11,000 dental technicians are entitled to put the coveted designation CDT after their names. They represent the elite of the industry, having proved through rigid written and practical examination that they are fully qualified to fulfill a written prescription provided them by a licensed practitioner of dentistry.

The National Board for Certification of Dental Laboratories was established in the late 1960’s. More than 200 laboratories have met its demanding requirements and can proudly display CDL on their letter head. These are laboratories which have demonstrated their competence and who share the objectives of elevating the standards for all dental laboratory operations of the industry; and identifying and bringing recognition to qualified dental laboratories.

Today and Tomorrow

The industry has come a long way from the brave but rudimentary laboratory set up by Stowe & Eddy in the 1880’s. Today there are over 9,000 commercial dental laboratories in the United States, and they employ about 35,000 technician. In a dental office, you will find a well-equipped and staffed with skilled and dedicated technicians. Together they comprise an integral component of the world’s best dental delivery system.

Today industry value volume is nearing the $1.5 billion mark; and today’s busy dentist relies with confidence on these laboratories to insure that the dentures and other devices produced for his patients are the finest available.

(Prepared by the National Association of Dental Laboratories Centennial Committee)
tion; the dangers of mercury exposure; relief and dis­
vaster forms of emergency loans; and dental patient fevers.

Unlike the dental profession it serves, the dental labora­tory industry has pioneered improvements and tech­nological advances in a craft which demands knowl­edge of chemistry, engineering principles, metallurgy, oral anatomy, physical properties of material; and a multitude of other sciences related to servicing the prosthetic appliances.

The beneficencies of this constant alertness to the need for change are the patients.

This dental team is not content to let tomorrow come; it is constantly preparing for it.

DENTISTRY'S FUTURE

In a look at dentistry's future for the remaining 1980's and 1990, Mark Freeland and Carol Ellen Schendler in their study note that expenditures for dentists' services are expected to reach $27 billion by 1985 (up from $22 billion projected for 1983) and to $42 billion by 1990.

Number of Physician and Dental Visits Per Person Per Year, Selected Years, 1968-1990

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The annual rate of growth from 1981 to 1990 is expected to be 10.4%. This is below the 13.1% an­num rate for 1971 to 1981, a period of a very rapid growth in dental insurance.

Private health insurance is expected to finance an increasing share of benefits for dentists' services in the next decade, but at a slower rate of increase. Faster growth in real income for 1983-1990 is ex­pected to put upward pressure on the demand for dentists' services, compared to the period of 1973-1982, all other factors holding constant.

The authors note that in some cases employers are switching from mental health coverage for their em­ployees, which provides significant benefits to a rela­tively small proportion of the covered population, to dental insurance coverage, which provides some bene­fits to a large proportion of the covered population. This may contribute, they say, to a fast growth in dental insurance coverage.

Freeland and Schendler say in their report: "An important factor to watch in the 1980's is the growing trend toward department store dentistry with its emphasis on competitive prices, evening and week­end hours and walk-in services."

Another trend which will need noting in the years ahead is the growing proportion of the nation's elderly to the general population. All studies show that the elderly poor are a larger number of senior citizens, and their propor­tion of the total population is increasing. Since the elderly need less dental care, their domination of the population will reflect and diminish the number of potential patients in the 1980's and 1990's.

Given its dedication, proven in the past, the vast and diverse American dental team is prepared for the years ahead, both from a professional as well as a per­sonal perspective.

Each of its constituent groups—dentists, hygienists, assistants and laboratory technicians—is alert and involved in dealing adequately with today's technolog­ical, psychological and social developments.

The American dental team has developed a dental economy that has the experience, resources and know-how to meet effectively whatever problems a new decade, and sooner a new century, brings.

It has good reason to observe—and celebrate—the 124th Annual Session of the American Dental Association.

The 60th anniversary of the American Dental Hygiene Association.

The upcoming 60th anniversary of the American Dental Assistants Association.

The 100th anniversary of the National Association of Dental Laboratories.

The 25th anniversary of the Certified Dental Tech­nician (CDT) program.

*Historical estimates are from various issues of Current Estimates from the Health Interview Survey. Site, for exam­ple, Jacc (1981).

**American Hospital Association panel survey data on inpa­tient days in community hospitals are used to approximate hospital inpatient data. It is assumed that each inpa­tient day is associated with one inpatient physician visit. See Wilson and Seapen, (1977).

The upcoming 60th anniversary of the American Dental Laboratory Industry.

The upcoming 60th anniversary of the American Dental Laboratory Industry.

The 100th anniversary of the National Association of Dental Laboratories.

The 25th anniversary of the Certified Dental Technician (CDT) program.

(Health Care Financing Review, March 1983, Vol. 4, No. 3)

America's Dental Laboratory Industry Celebrates Its Centennial

I am pleased to send greetings to the National Associa­tion of Dental Laboratories as it celebrates the century of service that dental laboratories have rendered to the dental profession. By applying their skills to the creation of safe, functional, and esthetic dental prosthetic devices, dental technic­ians help contribute to the well-being of many Americans. — Ronald Reagan, The White House, Feb­ruary 17, 1983.

In 1883, Dr. William H. Stowe, a practicing dentist, began accepting dental prosthetic work from other dentists. He soon joined with Frank F. Eddy, a tool­maker and machinist by trade, and formed the Stowe & Eddy Dental Laboratory in Boston. This was the first industrial type dental laboratory in the United States with a substantial continuity of development. It became the prototype and forerunner for more than 9,000 commercial dental laboratories in opera­tion in our nation today.

That first commercial dental laboratory was a far cry from the modern, sophisticated, high-tech labora­tories that are now commonplace across the U.S. It occupied one front room up one flight and another back room with three fires near the roof. An old, flat­faced soapstone tub saw many trips up and down the stairs.

"The equipment was crude. An old, flat-toped kitchen table served as a workbench. A lathe used for grinding and polishing was powered by a foot treadle, familiar to all who remember the old sewing machine. Although gas was in use for illuminating purposes in the city, it was not available in the rooms occupied by the laboratory. Waxing was done with alcohol lamps, and kerosene stoves heated the water. The two-flask Whitney Vulcanizer was operated by kero­sene and required constant watching to keep the thermometer at the proper and safe point. Soldering was accomplished with a mouth blow pipe and alcohol burns."1

"Two major problems confronted Stowe & Eddy and other dental laboratories organized in the early years of the American dental laboratory industry. The first was the unavailability of trained dental tech­nicians. The second problem was convincing the
dental profession that quality dental laboratory work could be accomplished outside the dental office with­out the immediate supervision of the dentist.

The training problem was handled simply by de­voting a considerable amount of time to teaching beginners from scratch. This 'off the street apprentice system' remained the main source of training tech­nicians well into the 1960's. Now more than 70 schools of dental technology are in operation in the United States, including 58 accredited programs that offer two-year courses in dental technology.

Convincing dentists to utilize the services of a com­mercial dental laboratory was in many ways a more difficult problem. At first, dentists would only trust the laboratories to polish vulcanite plates and with little else. However, gradually the early commercial laboratories proved they could perform more compli­cated tasks. For example, by 1891, Stowe & Eddy had 30 persons on their payroll.

The Inventors

Experimenting, tinkering or even pure dedication to improving the state-of-the-art was a way of life with the pioneering dental technicians (and remains so even today with many laboratories and technicians). Their contributions to prosthetic dentistry have been numerous and outstanding. To list just a few: the closed mouth technique — Samuel G. Supplee; nu­merous gold formulas — Louis Weinstein; the one­piece casting — George A. Wiechert; pre-formed arches — George H. Sternberg and Michael Zilinski; the Hagman Balancer — Harry Hagman; Bites Occlu­sional Guide and Drees Stress-Breaker — Jack Drees; Vitapax Crown — Herman Axelrod; Vitalium — Reiner Erdle and Charles Frange; and the custom­built, all-plastic denture — M. Monkey.

(Edward Kasper)

(Ronald Cooper)
American Dental Association
Founded August 3, 1859

Within two decades after the establishment of the first professional dental school in the United States in 1840, efforts to organize dental practitioners into a national association were successful. After the usual trials of organizing a young profession, twenty-six men representing various existing dental associations met in Niagara Falls, New York, on August 3, 1859, to establish what is, today, the largest organization of dentists in the world: the American Dental Association. The major predecessor associations were the American Society of Dental Surgeons, the American Dental Convention, the Southern Dental Association and the National Dental Association.

The basic structure of the present American Dental Association was established in 1913 and, although it has been modified many times since to meet the changing needs of the dental profession, its objective today reflects the same thrust that was visible more than one hundred years ago: "To encourage the improvement of the health of the public, to promote the art and science of dentistry and to represent the interests of the members of the dental profession and the public which it serves." Almost from its inception, the American Dental Association pioneered a separate system of licensure, education and organization for dentists.

The American Dental Association is organized into 54 constituent (state) and 490 component (local) dental societies and has a total membership of more than 133,000, including approximately 18,600 dental students. It is governed by a House of Delegates consisting of 418 members elected by the constituent societies and federal dental services. It is administered by the Board of Trustees consisting of eight officers and fourteen trustees representing the districts into which the constituents of the Association are divided.

The Association has its headquarters in Chicago in a 23-story building which was completed in 1965 at a cost of $14.3 million. It houses a staff of approximately 450 employees and sixteen dentally-related organizations. The annual budget of the Association is $31.1 million. The program of the Association is conducted through five bureaus, 16 councils, four commissions and the Washington office, all of which are designed to assist the Association in reaching its objective.

The Association has an extensive publishing program and produces The Journal of the American Dental Association, Dental Abstracts, Index to Dental Literature, the ADA Directory, Accepted Dental Therapeutics, Dentists Desk Reference, the ADA News and several related publications.

The Association has long taken an active role in the conduct and promotion of dental research. Since 1928 it has maintained a collaborative program on research in dental materials and basic research in the physical sciences with the National Bureau of Standards. The Council on Dental Therapeutics, established in 1930, was the first to provide scientific information to the profession on therapeutic products used in dental practice. The Association was instrumental in establishing the renowned National Institute of Health in Bethesda, Maryland. The Association also maintains a large research facility, the ADA Research Institute, in its Headquarters Building in Chicago.

The American Dental Association also provides multifaceted services to its members in the form of library and audiovisual services, socio-economic research studies and reports, insurance and retirement programs, dental health education and marketing services.

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Alfred C. Fones (1869-1938)

Fones was a pioneer, a propagandist, an ardent enthusiast and a great benefactor to the school children everywhere.

Alfred C. Fones (1869-1938)

The introduction of the paraprofessional to the ranks of healers in dentistry was a tremendous step forward in coping with the ravages of dental disease. To Dr. Alfred C. Fones goes the credit for raising the profession of dental hygiene to the important position it now occupies.

Born in Bridgeport, Connecticut on December 17, 1869, the son of Dr. Civilion Fones, a prominent dentist of that city, Alfred secured his dental education at the New York University College of Dentistry, from which he was graduated in 1890. He then entered practice with his father, an association which lasted for 17 years.

At a meeting of the Northeastern Dental Society in 1899, Fones heard a lecture by Dr. D. D. Smith of Philadelphia on periodic oral prophylaxes. Impressed by what he had heard, Fones returned home and for five years used Smith's techniques. In 1905, he trained his office assistant to do the prophylactic work for the children in his practice. Thus began the first dental hygienist in the United States.

Pleased by the results of his unique effort in preventive dentistry, Fones launched a campaign to make this treatment available to all the children in the schools of the city. Realizing that the local dentists wouldn't man such a program, he proposed the idea of a training school for dental hygienists—a term he coined. After many years of opposition from the dental profession, he opened the Fones Clinic for Dental Hygienists in November, 1913, in a garage connected to his home. Convincing of the project's value, the faculty assembled was indeed impressive: the deans of the Pennsylvania and Harvard dental schools, seven professors from Yale, two from Columbia and three New York specialists, all serving without compensation. Twenty-seven women were graduated in the first class. Most of them entered the Bridgeport schools, after Fones had persuaded the Board of Education to provide financial support. The results exceeded even Fones' expectations, with dental caries rates in these children being reduced approximately 75 percent.

So successful was the experiment that inquiries flowed in from all parts of the United States. Similar projects were started in widely separated areas; and with the passage of licensure laws, one school after another began training hygienists. Today these auxiliaries are utilized almost universally.

A grateful profession bestowed upon Dr. Fones its accolades. He was awarded the Newell Still Jenkins Memorial Medal by the Connecticut State Dental Association in 1922, and the Jarvis Medal of the New York State Dental Society in 1926. In addition, he served as president of the Connecticut State Dental Association and was also instrumental in founding the Junior College of Connecticut.

Dr. Fones died suddenly of a heart attack on March 15, 1938, at the age of 68. He was widely mourned by the new profession of dental hygiene, to which he had contributed so much and by which he will always be remembered.

In promoting prevention of dental disease, Dr. Fones was a pioneer, a propagandist, an ardent enthusiast and a great benefactor to the school children everywhere.

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The Dentist Who Founded Dental Hygienist Education

The introduction of the paraprofessional to the ranks of healers in dentistry was a tremendous step forward in coping with the ravages of dental disease. To Dr. Alfred C. Fones goes the credit for raising the profession of dental hygiene to the important position it now occupies.
Dental Assistant 1887

Dr. C. Edmund Kells of New Orleans is usually credited with having hired the first dental assistant. Dr. Kells, born in New Orleans on October 21, 1856, entered New York Dental College in 1876. He followed in his father's footsteps in entering the profession of dentistry. In 1878 Dr. Kells returned to New Orleans to practice dentistry and throughout his 47 years of dental practice he was an active innovator and writer.

In the Ohio Journal of Dental Science in 1887 in a paper entitled, "Methods and Means," Dr. Kells first mentioned "the lady assistant" who happened to be an innovation in those days, as this young lady was the first of her kind in the south.

In 1893 in an article in The Dental Cosmos entitled "Management of Dental Practice," Dr. Kells expressed to his fellow dentists his views on how to increase and improve a dental practice. The following are quotations of Dr. Kells' views on auxiliary utilization as expressed in 1893.

"... employment of an assistant at the chair. A few years, and the fruits of conscientious and conservative work and the most minute attention to office duties will show themselves in such an increase of practice as to quite over reach your individual capacity, notwithstanding the methods adopted and the most perfect systematizing of the smallest details, whereby absolutely no time will be unnecessarily lost. You will then discover that no inconsiderable portion of your time will be daily occupied by duties that could as well be performed by a skilled lady assistant and thereupon the employment of one will be the next...

On-the-Job Statistics

Given an average 8-hour work day, a majority of the hygienists surveyed treat between 6 to 10 patients per day (ADHA members 67.4%; nonmembers; 57.2%). Another one-fourth to one-third see between 11 to 15 patients per day (ADHA members, 26.8%; nonmembers, 34.6%).

Of the ADHA members responding, 54.1% indicated that between 30 to 45 minutes are allotted per recall patient, and 49.7% of the nonmembers responded similarly. One-third of both members and nonmembers have up to an hour allotted with a typical adult patient.

When asked if they had a choice in the amount of time spent with each patient, 43.4% of ADHA members and 51.9% of nonmembers would prefer to allot 30 to 45 minutes for a recall visit. However, more than one-half of the ADHA members (51.2%) and 41.4% of the nonmembers would prefer to have up to an hour for each recall visit.

Treatment of children is less time-intensive. Of ADHA members, 64.6% indicated that between 15 and 30 minutes are allotted with child patients, and an even higher percentage of nonmembers (75%) spend a similar amount of time with children.

Earning Power

In compensation for their efforts, 15.9% of ADHA members and 23.2% of nonmembers are paid by the hour, earning a median hourly salary of $9.25 if an ADHA member and $9.01 if a nonmember, according to those surveyed. A much larger proportion is paid by the day (40.2% of ADHA members, and 37.9% of nonmembers). The median salary in these cases was $84.92 per day for ADHA members and $75.32 per day for nonmembers.

Another 22.6% of ADHA members and 22.5% of nonmembers receive an annual salary or salary plus commission. Finally, 18.7% of ADHA members and 15% of the nonmembers surveyed are paid solely on a commission basis.

Almost half of ADHA members (47.5%) and 70% of the nonmembers surveyed indicated their annual income before taxes and other deductions was under $15,000. Another 31.2% of members and 21.8% of nonmembers reported they earned between $15,000 and $20,000. Of ADHA members surveyed, 14.4% reported earning between $20,000 and $25,000 and 6.2% between $25,000 and $30,000. For nonmembers the proportion was considerably smaller; only 5.5% earned between $20,000 and $25,000 and 2% between $25,000 and $30,000.

Dental hygienists on the average receive very few employment benefits such as paid vacation time, sick days, insurance and retirement benefits. Between 70 to 90% of those surveyed do not receive major medical coverage, malpractice insurance, disability insurance, life insurance, retirement plans or continuing education days. Dental care is the only benefit that is frequently provided.

Professional Ties

Representation of professional interests was the primary season cited for belonging to ADHA by over two-thirds of the ADHA members participating in the survey (67.1%). ADHA continuing education programs was the next category, selected by 14.2% as the principal reason for joining, followed by insurance programs (13.2%) and employment services (1.9%).

(Reprinted from Dental Hygiene, December 1982)
Dental Hygienist 1983

WHO WE ARE: A report on the Survey of Dental Hygiene Issues: Attitudes, Perceptions and Preferences

Y ou’re 29, have an AA degree, were licensed within the past 10 years and work in a smaller urban or suburban community rather than a major metropolitan area. In your practice you live in a smaller urban or suburban community rather than a major metropolitan area. In your practice you work in a private dental care setting and earn about $1,500 a year. You principally work in one practice site and you also do volunteer work in schools and other health-care facilities.

The "you" described above is no one single dental hygiene but a composite, drawn from responses made by dental hygienists throughout the United States to the recent survey commissioned by the American Dental Hygienists' Association. The survey, entitled "Survey of Dental Hygiene Issues: Attitudes, Perceptions and Preferences," was conducted this past year by the University of Illinois Survey Research Laboratory for the ADHA. The survey was not only made by dental hygienists but also dentists and consumers, all on a random-sample basis, to gather information on the dental hygiene profession.

General goals of the survey are to provide:
• A demographic and socio-economic data base of the dental hygiene profession, including attitudes and perceptions of dental hygienists regarding ADHA.
• Information on attitudes, perceptions and preferences regarding traditional and nontraditional practice settings for dental hygienists.
• Information on attitudes and perceptions of the existing role relationship between dental hygienists and dentists.
• Information on the degree of satisfaction and preference of the general public toward dental hygiene services.

A total of 1,503 dental hygienists responded to the survey questionnaire, of which 897 were members of the American Dental Hygienists' Association and 606 were nonmembers.

A Youthful Image

As this article stated at the outset, dental hygienists are basically a youthful group. The median age of all dental hygienists responding in the survey was 29. Stated differently, slightly over half of the hygienists surveyed are under 30 years of age. Over 80% are under the age of 40.

Tying in with this fairly youthful image is the fact that three-fourths of the currently licensed dental hygienists graduated between 1970 and 1980, and over two-thirds have been practicing 10 years or less on either a full- or part-time basis.

Although relatively young, most dental hygienists are not single. Over two-thirds of the ADHA members indicated they are married, and of the nonmember hygienists, more than three-fourths are married. Correspondingly, 68.9% of the ADHA members and 74.9% of the nonmembers share a joint income with one or more wage earners in their household.

The Associate of Arts or Associate of Science degree predominates. Among ADHA members, 61.4% hold an AA or AS degree and for nonmembers the figure is 71.5%.

One-third (33.7%) of the ADHA members surveyed hold a baccalaureate degree versus one-fourth (24%) of the nonmembers surveyed. A small minority of those surveyed had attained higher degrees.

Practice Site

Many dental hygienists are settled into practice in smaller communities. A majority of the dental hygienists surveyed live and practice in smaller urban or suburban settings. Fewer than one-tenth of both ADHA members and nonmembers reported living in step toward the satisfactory handling of the growing practice.

"To be a successful assistant, a young lady must be quick, quiet, gentle, attentive without being obtrusive, and intelligent. In your office her duties will be systematically arranged. Twice in each week, whether it may be considered necessary or not, every drawer in the cabinet should be thoroughly dusted, and the instruments therein rubbed with chamois or burnedished, as the case may be. With the same regularity the electric engine and hand-piece should receive a thorough cleaning and oiling.

"While the engine is being used for evacuating, she should keep the cavity free from chips with the ship-blower, which will allow the wall to be always in plain sight, and that step in the operation will be much more rapidly completed. Just before being ready for it, she should prepare the filling material, whether it be gold, amalgam or cement, that all will be ready and no delay met with when the same is called for. It should be her duty to see that supplies of all kinds are always on hand; a small stock of everything that is used should be kept in a cabinet reserved for that purpose. The rubber dam should be cut in the sizes used, silk cut into proper lengths and waxed, spunk torn up into various sizes desired, and placed, according to size, into the several compartments reserved for it."

"... She should realize that her duties do not include entertaining the patients, and should understand that the less she has to say the better satisfaction will she give. In a little while she will learn to anticipate your wants, and a look or semi-gesture may be frequently used instead of a sentence. That during a protracted sitting she will rapidly perform one duty after another, with scarcely a word from yourself, will be frequently a surprise to the patient."

"... it should be her duty to receive all patients, make appointments, attend to your correspondence, look after the linen, and take a general interest in the welfare of the office."

It will be the duty of the secretary to receive all patients whom the office-boy usher into the reception room, and advise either yourself or your associate of their presence.

"When one calls for an examination or the changing of a wedge, or any attention of that sort, she should seat the patient in the chair in the consultation room and notify you when she is ready. It will then occupy but a few seconds of your time to slip in there, do what is necessary, and return to your own chair."

... It will be her especial duty that you be not interrupted uselessly. That mysterious trait known as 'womanly' intuition will soon teach her to 'size up,' as it were, a doubtful looking customer, and when she discovers her or she is a book-agent or insurance friend, or other creature of like stamp, she must be an inexpressible barrier between such and your operating room. She should also take charge of the 'supplies,' and order such as are needed, once a week. The lines of the office, not an inconsiderable item, should also be under her care.

"The method of bookkeeping to be inaugurated will be a great matter under her care, she keeping the day-books upon which is entered all cash received and work charged, and the ledger into which the entire work of both your associate and yourself is entered. To have the arduous duties of the bookkeeping and making out of the bills taken off your hands will prove a great relief, for otherwise this work would have to be done in a great measure at night or on Sundays."

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In 1887, despite the conscientious efforts of the auxiliaries themselves, and the good intentions of the dentists who employed them, dental assistants were little more than housekeepers and window dressing. Their primary purpose was to make it socially acceptable for women patients to visit dental offices unaccompanied.

During the early days of the American Dental Assistants Association, dental assisting education was characterized by lack of uniformity in standard practice. It was not uncommon for former laboratory technicians or dental salesmen to offer commercial practice. It was not uncommon for former laboratory technicians or dental salesmen to offer commercial assistance to dental college deans to establish dental assisting training programs in dental schools. It took 31 years of diligent work and perseverance to win accreditation for dental assisting education programs. In February 1961, the dental assisting programs. The 29 programs listed today there are 292 dental assisting programs accredited by ADA's Commission on Accreditation in institutions of higher learning.

225,000 PRACTICING ASSISTANTS

Today, 225,000 practicing dental assistants are indispensable members of the dental health care team. They demonstrate commitment to high-quality care by providing:

- clinical support—such as preparing and dismissing patients; sterilizing and disinfecting instruments and equipment; maintaining the operator.
- chairside support — taking and exposing radiographs; recording vital signs; making preliminary impressions for study casts; participating in four-handed procedures.
- laboratory support — trimming and polishing study casts; fabricating color impression trays; cleaning, repairing and polishing removable appliances, fabricating temporary restorations.
- business office support — maintaining patient records; coordinating appointment scheduling; organizing supply control; setting up payment plans, and processing insurance payment claims.

Dental assistants allow dentists the time to provide better quality health care at a lower cost. They can be found in private and group dental practices, mobile dental units, military installations, colleges and universities, hospitals, nursing homes, dental school clinics and public health facilities.

The Father of Oral Hygiene

Robert Bunon (1702-1748)

By Rosetta Gervasi

Robert Bunon was the foremost member of a historically significant galaxy of eighteenth century French dentists who widened public acceptance of scientifically-based dental knowledge and practice. These men established a strong basis for scientific investigation and through their writings informed and inspired pioneering practitioners of dentistry throughout the world. This was especially true in colonial North America and, later, in the United States. Bunon and other French precursors provided widely available scientific dental knowledge, the example of excellent standards of achievement, and the strength of professional pride which contributed vitally to the establishment of the modern dental profession.

During his early student years, Bunon studied conventional techniques with several dentists and read the available dental texts. Motivated by an urge to expand his knowledge, he adopted the study pattern of many distinguished ancient and medieval dentists; that is, he traveled to the locales of reputable practitioners and practiced in places which offered a wide variety of patient needs and opportunities for observation. In this way he acquired knowledge and experience superior to those of many other dentists.

When Pierre Fauchard's Le Cuirassier-Dentiste appeared in 1728, Bunon was disappointed with some of its contents and decided to write a book of his own on dentistry. But before publishing the results of his studies and observations, Robert Bunon decided to strengthen his reputation by obtaining a diploma as a surgeon dentist. Once he had the diploma, Bunon felt he was ready to publish the results of his years of preparatory work and conclusions reached from his own experiences.

At Paris, in January, 1741, Robert Bunon published a letter on the so-called "eyetooth" in the newspaper Mercure de France. He disproved anatomically the widely accepted belief that the extraction of an upper canine tooth constituted a serious danger to the eye immediately above it. In the same year, and again on the Mercure, Bunon published a treatise on the teeth of pregnant women. He combated vigorously only the prevailing practice of forbidding the extraction of teeth during the period of gestation. He stressed, instead, the need to treat the dental diseases of pregnant patients with particular care and concern. As a result of the good reception by other dentists and the public of his two Mercure articles, Bunon re-solved in 1743 to publish his essay on the Maladies of the Teeth, Wherein Are Suggested the Means of Obtaining Their Good Conformation from the Earliest Age, and of Assuring Their Preservation During the Whole Course of Life. The Chief Surgeon of the Realm granted his patronage with the understanding that Bunon would guarantee to provide the proofs for his many assertions on various dental subjects. Rob­ert Bunon asserted that he was the discoverer of erosion of the teeth. And in cases of stoma­titis, Bunon advised complete removal of teeth before adminis­tering other treatment. He also used the same measures against her­petic stomatitis occurring in patients undergoing treatment for syphilis.

Extracts from this important book were published in the principal journals with eulogies for the author. Robert Bunon's fame spread among French dentists and the public. His practice grew and he attracted many wealthy patients — a great ambition among eighteenth century dentists.

In 1746, two years before his death, Robert Bunon published his second book, Experiences and Demonstration Made at the Hospital of Salpêtrière and St. Côme, Before the Royal Academy of Surgery, Serv­ing as Continuation and Proof to the Essay on the Maladies of the Teeth.

By his writings, Robert Bunon influenced public opinion greatly in regard to the proper care of the teeth. Especially valuable were his writings and dis­cussions on the importance of the first dentition, the means of preventing anomalous positions of the per­manent teeth, and the necessity of removing teeth from all oral areas. Robert Bunon was the first author to describe dental hypoplasia accurately. Thus, he merits recognition as one of the foremost precursors of modern scientific dentistry.

The author is editor of Dental Assistant, official journal of the American Dental Assistants Association.

American Dental Assistants Association

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