

SPRING • 1984

JOURNAL

AMERICAN COLLEGE OF DENTISTS



ETHICS IN DENTISTRY—A SYMPOSIUM

OUR FUTURE IS FANTASTIC

The Objectives of the American College of Dentists

The American College of Dentists in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals.

(a) To urge the extension and improvement of measures for the control and prevention of oral disorders;

(b) To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all and to urge broad preparation for such a career at all educational levels;

(c) To encourage, stimulate and promote research;

(d) Through sound public health education, to improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;

(e) To encourage the free exchange of ideas and experiences in the interest of better service to the patient;

(f) To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public; and

(g) To make visible to the professional man the extent of his responsibilities to the community as well as to the field of health service and to urge his acceptance of them;

(h) In order to give encouragement to individuals to further these objectives, and to recognize meritorious achievements and potentials for contributions in dental science, art, education, literature, human relations and other areas that contribute to the human welfare and the promotion of these objectives — by conferring Fellowship in the College on such persons properly selected to receive such honor.

The JOURNAL

Volume 51
Number 1
Spring 1984

of the AMERICAN COLLEGE of DENTISTS

**A Quarterly
Publication
Presenting
Ideas & Opinions
In Dentistry**

Keith P. Blair, DDS, Editor
Gordon H. Rovelstad, DDS, Business Manager
Editorial Board
Leo E. Young, DDS, Chairman
Robert C. Coker, DDS
James A. Harrell, Sr., DDS

The Journal of the American College of Dentists (ISSN 0002-7979) is published quarterly by the American College of Dentists, Inc., McFarland Company, Harrisburg, Pennsylvania, with Second Class Postage paid at Harrisburg, Pennsylvania and additional points. Copyright 1984 by the American College of Dentists, Inc.

Subscription \$15.00 a year. Cost of additional postage for airmail will be billed to subscriber. Single copies \$6.00.

All expressions of opinion and statements of supposed fact are published on the authority of the writer over whose signature they appear and are not to be regarded as expressing the views of the American College of Dentists, unless such statements or opinions have been adopted by the American College of Dentists, Inc.

Correspondence relating to the *Journal* should be addressed to the Editor, Keith P. Blair, DDS, 4403 Marlborough Avenue, San Diego, CA 92116.

Changes of address and subscription requests should be addressed to the Business Manager, Gordon H. Rovelstad, DDS, American College of Dentists, 7315 Wisconsin Avenue, Bethesda, MD 20814.

Reprint requests should be directed to the author.

For bibliographic references the *Journal* is abbreviated J Am Col Dent and should be followed by the volume number, page, month and year. The reference for this issue is J Am Col Dent 51:1-49, Spring 1984.



CONTENTS

From the Editor's Desk	3
A Full Cycle?	
News of Fellows	4
Section Activities	6
Ethics in Dentistry	8
Ethics in the Practice of Dentistry	9
<i>Burton H. Press</i>	
A Person Within a Community of Persons	12
<i>W. Robert Biddington</i>	
The Physician's Covenant	16
<i>William F. May</i>	
Ethics in Dental Research	19
<i>William D. McHugh</i>	
1983 Convocation Pictures	22
Citation Presented to Barney Clark Family	26
Our Future Is Fantastic	28
<i>Arthur A. Dugoni</i>	
Health Care: Changes, Challenges	35
<i>Richard J. Reynolds</i>	
Understanding Communication Needs of Older Dental Patients	38
<i>Enid J. Portnoy</i>	
A Treasury of Dentistry	42
Maintaining Realistic Standards for Admission to Schools	44
<i>H. Barry Waldman</i>	
In-Course Remedial System	46
<i>Wallace S. Edwards</i>	
Instructions for Contributors	48
Directory of Officers	49

A FULL CYCLE?

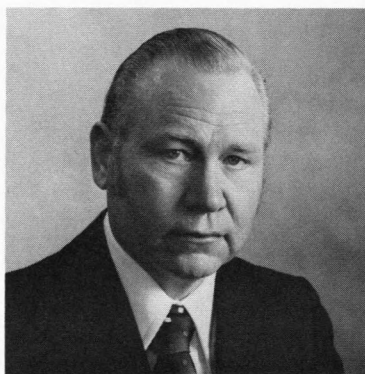
Are we heading full cycle back to previous times when dentistry was more a trade than a profession? Recent trends seem to indicate that possibility.

Early in this twentieth century, the watchword for the public was *Caveat Emptor* (let the buyer beware). The patient had no protection from an unscrupulous dentist and no way to judge that a dentist might be unqualified to provide the services he advertised.

In those days, dentists were primarily concerned with entrepreneurship. Their advertising was blatant and often misleading. Dental schools were mostly proprietary. Educational standards varied greatly from school to school and from one region to another. State licensing lacked credibility. Dental journals were "house organs" published by dental supply companies who allowed dental societies to use space in the company publication. The dental profession had no control over the contents or the opinions expressed.

The concerned leadership of the dental profession, at that time, determined that something must be done to protect the public and to bring about a profession that had integrity. Educators set standards for dental schools. The profession helped to develop regulations for state licensing qualifications. The Flexner Report on medical education in 1910 had aroused all of the professions to a greater responsibility and motivated them toward the highest possible ideals.

There was a strong movement to professionalism in dentistry. To protect the public, all advertising of professional services became unethical for members of the Ameri-



Keith P. Blair

can Dental Association. Codes of conduct (ethics) were added to the by-laws of dental societies. Dental publications were sponsored by and controlled by the profession.

Dentistry's golden era of high ethics and high ideals lasted from the 1930's through the 1960's.

In the late 1960's changes in social attitudes began to be noticed. The advent of the consumer advocate brought the philosophy that dental treatment was just another commodity for price comparison and that quality of care was irrelevant. In 1977, the U.S. Supreme Court, in a narrow 5 to 4 ruling (Bates-O'Steen), decided that a ban on advertising by lawyers violated the First Amendment rights to free speech for some members of the Bar Association who wished to advertise.

The Federal Trade Commission (FTC) promptly applied the Bates O'Steen decision by proclaiming that all of the learned professions were now considered trades and therefore subject to FTC regulations. The FTC sued the American Medical Association and the American Dental Association for restraint of trade and antitrust violations because AMA and ADA Codes of Ethics forbid advertising by physi-

FROM THE EDITOR'S DESK

cians and dentists who were members.

Throughout the government and the courts, in recent years, there has seemed to be a trend to de-professionalize the health professions. It has resulted in a decline in ethics, a return to the business-first dental office and a recurring plethora of just-barely-legal dental advertising that is confusing and misleading to the public. As in 1910, dentists are once again business competitors instead of professional colleagues in the treatment of patients.

These changes over the last ten years are definitely not in the best interests of the public. The health professions must somehow convey a message to the nation that going back to the wide-open, unprotected ways of the past will make things worse, not better, for the patient.

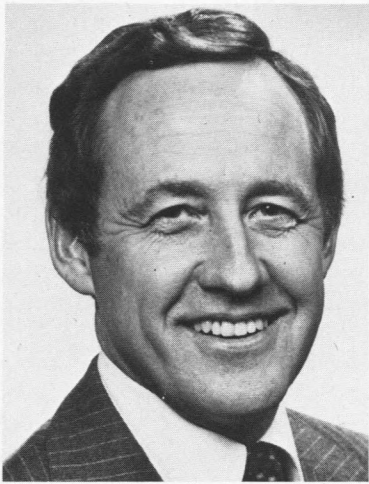
Perhaps it is significant that some members of the Supreme Court are now recognizing the negative results of their Bates-O'Steen decision. Earlier this year, in addressing the American Bar Association, Chief Justice Warren Burger bemoaned the fact that some lawyers see their profession as a trade in the marketplace that can be advertised like any common commodity.

The dental profession can only be deeply concerned and frustrated over this regression which has been effected by entities in society outside of the health professions. Fifty years of progress in professionalism and excellence in the quality of care is being undermined by these actions. The high ideals of the 1920's are being strewn to the winds.

Do the people who are responsible for these changes understand what they are doing?

Keith P. Blair

NEWS OF FELLOWS



Carl E. Rieder

Carl E. Rieder of Newport Beach, California was installed as President of the Pacific Coast Society of Prosthodontists. Dr. Rieder is in private practice and is a clinical professor of Advanced Education in Prosthodontics at the University of Southern California. He is the founder and director of the Newport Harbor Academy of Dentistry.

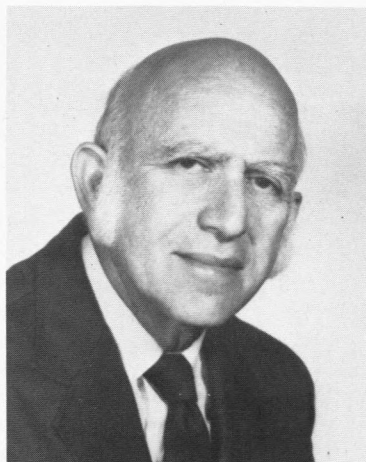
Manuel M. Album, Jenkintown, Pennsylvania received the award of "ASDC Great" for 1983 from the American Society of Dentistry for Children. The award was presented for his devotion to the health of children everywhere and for his many contributions to the dental health of children. Dr. Album was the recipient of the ASDC Award for Excellence in 1980. He is in the private practice of pedodontics.



Carlton H. Williams

Arnold S. Weisgold of Philadelphia has been appointed Associate Dean of Clinical Sciences at the University of Pennsylvania School of Dental Medicine. He also serves the school as Professor and Chairman of the Department of Form and Function of the Masticatory System and Director of Postdoctoral Periodontal Prosthesis.

Alexander M. Samuels was elected president of the Northeastern Society of Orthodontists, one of the eight constituent societies of the American Association of Orthodontists. Dr. Samuels is in private practice in Bayside, New York and is an associate professor of orthodontics at Fairleigh Dickinson Dental School.



Manuel Album

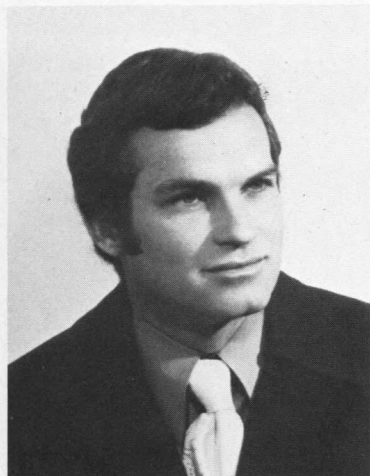
Carlton H. Williams of San Diego received the ADA Distinguished Service Award, the highest honor that the American Dental Association can bestow on a member of the dental profession or allied professions. He was selected for this award in recognition of his unselfish service and dynamic leadership in dental affairs. He presided as Speaker of the ADA House of Delegates from 1967 to 1972 and served as ADA President in 1973-74. He currently serves as Speaker of the General Assembly for the Federation Dentaire International. Dr. Williams maintains a general dental practice in San Diego.



James N. Clark

James N. Clark, Dubuque, Iowa has been elected president of the American Society of Dentistry for Children (ASDC) which honored him with its Distinguished Service Award in 1974. Dr. Clark is in the practice of General Dentistry in Dubuque.

Sidney S. Spatz has been appointed as Assistant Dean for Clinical Affairs at the University of Pittsburgh School of Dental Medicine. Dr. Spatz has been a member of the school's oral surgery faculty since 1948 and is certified by the American Board of Oral and Maxillofacial Surgery.



John N. Groper

John N. Groper of Los Angeles has been elected to the Executive Council of the American Society of Dentistry for Children (ASDC). He is the current president of the American Association of Pedodontic Diplomates. Dr. Groper is in the private practice of pediatric dentistry and is a clinical professor in the Department of Developmental Dentistry at the University of Southern California.

Harry B. McCarthy, Dallas, has been inducted into the Baylor College of Dentistry Hall of Fame with a citation that read: "Presented in recognition of outstanding services and devotion to the Science and Art of Dentistry at Baylor College of Dentistry." Dr. McCarthy is Dean Emeritus of the School where he served as Dean from 1952 to 1968.

Gilbert N. Robin of Pittsburgh has been recognized for his outstanding contributions to dentistry by the establishment of the **Gilbert N. Robin Continuing Education Scholarship Award**. The award was established by the 18 off-campus Continuing Education Coordinators at the University of Pittsburgh School of Dental Medicine. The annual award will be made to a fourth year student at Pittsburgh who exemplifies qualities of leadership and excellence. Dr. Robin served Pittsburgh for 18 years as Director of Continuing Education and Professor of Restorative Dentistry.



Harry B. McCarthy

Ralph S. Kaslick, Dean of Fairleigh Dickinson University School of Dentistry, has been named acting provost of the University's Teaneck-Hackensack campus. He has served as Dean of the School of Dentistry since 1976. Fairleigh Dickinson University is the state of New Jersey's largest independent institution of higher education.



The Gilbert N. Robin Continuing Education Scholarship Award has been established at the University of Pittsburgh School of Dental Medicine. Pictured at the ceremony, left to right are James W. Smudski, Dean of the Dental School, George R. Kleben, Gilbert N. Robin and Willis L. Supler, Jr.



Ralph S. Kaslick

Jason R. Lewis of Richmond, Virginia was presented with the Harry Lyons Award for outstanding leadership, scholarship and service to the dental profession by the Richmond Dental Society.

SECTION ACTIVITIES

Northern California

There was considerable activity in the Section during 1983.

The Section sponsors an annual one-day program, the Willard C. Fleming Annual Memorial Lecture, in cooperation with the University of the Pacific and the University of California at San Francisco. Usually the event is held in January of each year.

A joint dinner meeting is held with the International College of Dentists during the annual meeting of the California Dental Association at San Francisco. This year it was nice having the American College of Dentists Convocation in our state (at Anaheim). The speakers were excellent and the meeting was well attended by California Fellows.

The yearly review of the Section brings sadness as we note the passing of several long time members including our former Regent, Robert Cupples and the Section Secretary-Treasurer Charles Carara.

We are proud that Regent Cupples successor is Albert Wasserman, a Section executive committee member, to be the new Regent for Regency 8.

In 1983, the Section contributed \$1000. to each of the northern California Schools of Dentistry located in San Francisco—the Uni-



Arthur M. La Vere, Secretary-Treasurer of the Northern California Section, proudly signs the checks which will contribute \$1000. each to the two dental schools in San Francisco—the University of the Pacific and the University of California.

versity of the Pacific and the University of California.

The annual installation of officers was held at the Marines' Memorial Club in San Francisco. Chairman Kenneth Holcombe handed the gavel to the incoming Chairman, Clifford Loader. Edwin Hyman will be the Vice Chairman and Arthur La Vere will continue as Secretary-Treasurer for the Section.

Kenneth G. Holcombe

New York

Chairman Howard L. Ward presided over the meeting. Among the distinguished guests introduced were ADA Trustee Abraham Kobren; Theodore R. Lerner, President of the Dental Society of the state of New York; Gordon H. Rovelstad, Executive Director of the American College of Dentists; Regent Sumner H. Willens, ACD Regent; Immediate Past Regent Gerard E. McGuirk and Anthony Di Mango, Chairman of the Greater New York Dental Meeting.

Outstanding senior dental student awards were presented to Elizabeth Tampone of New York University and to John Murphy of Columbia University.

Distinguished Service Awards were presented to Dean Allan J. Formicola of Columbia University Dental School, Dean Richard D. Mumma of New York University College of Dentistry and to Henry I. Nahoum, Past Section Chairman.

Robert L. Fisher

Western New York

Section Chairman Bernard Tofany announced the establishing of the Section Discretionary Fund to

help needy dental students at the University of Buffalo, to be administered by a Section Committee along with Dean William M. Feagans of the Buffalo Dental School.

The fund will be started with a \$2000. contribution and with an anticipated \$1000. to be given each succeeding year. Support for the fund will come from Section dues. Memorial contributions and other donations could also increase the amounts in the fund.

The establishment of the Discretionary Fund and the purpose of the fund received enthusiastic support from those present at the meeting.

New officers elected were Chairman Milton Jacobson, Vice Chair-

man Roger W. Triftshauer and Secretary-Treasurer Warren M. Shaddock.

Warren M. Shaddock

West Virginia

Chairman Michael J. Joseph reported on his attendance at the Section Officers Meeting in Anaheim, California and spoke about possible Section activities.

Dr. W. Robert Biddington, Dean of the West Virginia University School of Dentistry, proposed a Section project to recruit dental students within the state. This could expand the scope of the school's recruitment committee to interest

well-qualified prospects for dental school.

Hawaii

All officers were re-elected for another term: Allen M. Ito, Chairman; Kanemi Kanazawa, Vice Chairman and John M. Fujioka, Secretary-Treasurer.

A continuing Section project over the past several years is to collect dental books and Journals and send them to dental schools in Indonesia. The boxes of books are transported by the U. S. Navy, as arranged by retired Captain Victor Niiranen.

Allen M. Ito

University of Pittsburgh School of Dental Medicine —Class of 1928



Twenty-three members of the Class of 1928 attended their 55th reunion last year. In that class, there were 252 graduates. During the senior year, the majority of the Pittsburgh varsity football and basketball players were from this class. Pictured, left to right, are those attending: Front row: Fellow Milton Nicholson, Irwin Zimmerman, Harry Decker, Natalie West Decker, Elson Jones, Douglas Hough, John Lloyd. Second row: George Moke, Fellow David Ehrlich, Fred Nelan, Marion D. Frezza, Stephan Bondy, William James, Samuel Pittler, Theodore Rohm (class secretary). Third row: William Rihaneck, Edward Glotfelty, Richard Goldberg and Robert Gaskeen

ETHICS IN DENTISTRY

**A Symposium at the Annual Meeting
Of the American College of Dentists—
October 1, 1983 Anaheim California**

Ethics in the Practice of Dentistry 9

Burton H. Press

A Person Within a Community of Persons..... 12

W. Robert Biddington

The Physicians's Covenant 16

William May

Ethics in Dental Research 19

William D. McHugh

ETHICS IN THE PRACTICE OF DENTISTRY

Burton H. Press*

The kind of authority claimed by the professions involves not only skill in performing a service, but also the capacity to judge the experience and needs of clients.

The legitimation of professional authority involves three distinctive claims: first, that the knowledge and competence of the professional have been validated by a community of his or her peers; second, that this consensually validated knowledge and competence rests on rational, scientific grounds; and third, that the professional's judgment and advice are oriented toward a set of substantive values, such as health. These aspects of legitimacy correspond to the kinds of attributes—collegial, cognitive, and moral—usually cited in definitions of the term "profession." A profession, sociologists have suggested, is an occupation that regulates itself through systematic, required training and collegial discipline, that has a base in technical, specialized knowledge, and that has a service rather than profit orientation enshrined in its code of ethics.

Professional claims, of course, should not be taken simply at face

value. The rewards of professional status encourage would-be and even established professions to invent or elaborate credentials, sciences, and codes of ethics in bids for recognition. Rather than as indicators of professional status, such features should be seen as the means of legitimating professional authority, achieving solidarity among practitioners, and gaining a grant or monopoly from the state.

Some of our present concerns about ethics are correlated with diminished economic security for our younger practitioners, and soon, I think, for all practitioners.

It's interesting. We're in a conservative mood, politically, in this country. The election of Ronald Reagan was a symbol of this. And yet the public concern about the cost of health care is shared by conservatives and management, as well as labor. That concern is not unlike those historically expressed by liberals for the socially and financially oppressed. The scenario is the same, but the players are different. Both focus on the abuses of the physician or dentist as a businessman, his lack of social responsibility. Of late the Reagan administration offers proposals that threaten to regulate health as a

public utility. Will the accomplishment of such proposals enhance or hinder ethical conduct, however we may end up defining it?

We need to look at history, as our judicial councils rush to indict young practitioners who seem to display their wares somewhat wantonly. We always take care of the demand, and give lip service to unmet need. Today a significant number of practitioners, including their American Dental Association, sound like public health dentists. They are very interested in access, in defining the reasons why various groups do not seek or receive dental care.

Certainly the Flexner report in 1910 focused emphasis on the technological side of medical care. But social questions, the numbers and types of providers necessary to meet public needs, were not really discussed. It's a two-edged sword. Numbers were not discussed when there was a shortage, and numbers have not been discussed in the public sector now that there is a relative surplus.

Shouldn't the public be very concerned about the economics of shortages and surpluses? Shouldn't they be concerned about the resulting effect on ethics, on social consciousness, on the day-to-day behavior of the doctor vis-a-vis his patient?

*Assistant Dean, School of Dentistry, University of the Pacific, San Francisco, California, President, American Dental Association.

Dr. Milton Roemer of U.C.L.A. makes the charge that health care in recent decades has become seriously corrupted by a spirit of entrepreneurship. Is this true? Is the perception actually the reality? Was the horse and buggy doctor as good as he was perceived to be? And is today's doctor as dollar-oriented as the media would make him out to be?

Increasing the demand for care is our only option. We have no alternatives. The only way to do this is by effective dental education—prime time dental education. I call it marketing.

In order to define, interpret and codify/enforce ethics for today's dentistry, and today's dentist, do we need to go beyond the traditional, historical precepts of: a) respecting individual dignity, b) doing no harm, or c) respecting the confidentiality of the doctor/patient relationship? The doctor will have to be perceived as more socially responsible if he is to regain the public confidence and if he would like to continue to play a part in defining his own future.

Which is the proper mode? Is the only ethical code that should apply the individual contract between doctor and patient, determining the manner and cost of the therapy used, or is the demand for social and financial accountability valid? Are the current cost-containment measures, such as DRG's, and PPO's, pure cost containment efforts, or are they public statements about that social and financial accountability? And if they are, does that relate to our discussion of individual ethics today? And, further, how does all of this relate to the continual high ranking of dentists in the public polls? Is that high ranking a compilation of individual comments about "my dentist?" Does that reflect a protection of

choice, rather than a continued mandate to the profession as a whole?

Escalating malpractice—including informed consent, the need for accurate records—and even the unwillingness of a neurosurgeon to stop and give aid at the site of an automobile accident—does all of this reflect an erosion of ethical perceptions?

I do not accept the oft-repeated argument in international literature suggesting that the fee-for-service mode of practice is directly correlated with an erosion of ethics. In fact, I suggest that some of our present concerns about ethics are correlated with diminished economic security for our younger practitioners, and soon, I think, for all practitioners. I do believe society has the right to make broad social decisions about the delivery of health care. But the public at large is not entitled to relieve itself of this burden by imposing quasi-ethical rules on the profession. Conversely, the profession cannot sustain the imposition of quasi-ethical rules on individual practitioners in order to sustain a comfortableness with the status quo in an era of accelerated change.

And how will this era of high technology affect the ethics of the practitioner?

A recent conference at a medical school featured subjects selected by the students. These subjects included:

- a) Sterilization of the mentally handicapped
- b) The ethics of population control
- c) Occupational hazards to reproduction
- d) Prenatal diagnosis
- e) Ethical considerations in sex education
- f) Sperm banking
- g) Artificial insemination
- h) Surrogate motherhood.

Is this a lack of social and ethical concern by the younger generation? I think not.

Is there any plus or minus for social consciousness when I lobby

Congress for parity with medicine, even though we have been more successful at curing our diseases? If you were not a dentist, but a member of Congress faced with the fiscal deficits of this country, would you buy the argument that the impact of dental disease is equal in priority to heart disease, cancer, etc.?

What part does role-modeling play in the ethical behavior of a society? Are you consciously or unconsciously affecting ethical behavior?

Our labeling of the actions of colleagues who are involved in alternate delivery systems has an adverse reaction. Is it a head in the sand attitude, or is it based upon knowledge and understanding? Can we wish PPO's away?

In New Orleans last week a dentist said to me: "You know, Burt, I was really against third parties, but now if we didn't have dental insurance, I don't know what we would do!"

What are you doing to help the young graduate begin his/her professional life in an ethical and sensitive way? If you resist their intrusion because of economics, because your own practice is slower, is that in tune with our

Let me tell you emphatically that the marketing of professional services is ethical.

historical definition of professionalism? Have a lot of our public pronouncements always had a smoke screen basis? Was George Bernard Shaw correct when he said, "Every profession is a conspiracy against the public?"

William Goode, writing in 1960, suggested that one of the basic ten traits of a profession is "to establish norms of practice that are more stringent than legal controls."* Certainly, historically we have done that. In fact, some of our contemporary dilemma is that changes in

the law are increasing the relative stringency of our own rules; i.e., the disparity is getting wider. But in a time of greatly accelerated change—legal, social, technological and professional change—how do we accommodate? Is it necessary for us to give ground, to show an understanding and flexibility, and will such behavior compromise our historical definition of professionalism?

Well, we are not being left to our own devices. We are slowly losing our ability to self-regulate. Why? Can we regain that public mandate? Will the entrepreneurial forces afoot—certainly a revered benefit of capitalism—make it more difficult? Corporate America is getting into the health delivery business, attracted by the availability of a cheaper labor pool. Normal market forces are underway, and yet some have suggested that ethical problems in the professions stem from the change from preceptor training to formal education. The primary effect, according to this theory, is the elimination of a direct role model.

Well, what an opportunity!

Other forces which we do not like are making the associateship relationship mandatory for the survival of traditional values in dentistry. This fact allows us to re-create the ethical preceptorship. My bottom line is—I don't think ethical behavior has changed very much. Certain factors have made us and the public more aware of deviations from the norm. Perhaps they were always there, but were detected less often. T.V., the other media and the computerization of third party records are part of the process in this information-driven society.

We met during this week with some promoters of PPO's and XPO's. They talk about the ethics of "over-utilization." In fact, they would have us believe that over-utilization is responsible for the advent of PPO's. But is it over-utilization—or actuarial cost-controlling, semantically shrouded in ethical terms? And what is the role

of the American Dental Association in ethics?

In some ways I suggest that the branding of behavior in delivery as unethical has hinted at economic restraint and has muddied the waters considerably. The ADA and the profession should be out in front in peer review, in obliterating any historical "conspiracy of silence." Those third-party guests suggested our peer review was awful. But, I'm not so sure we are out in front. Lip service is not

If your ADA doesn't ethically increase the demand for necessary dental care, the resultant vacuum will be filled by entrepreneurs, and by the increasingly crass commercial behavior of our colleagues.

enough. The public perception is based upon our actual behavior. Will a more aggressive role in this light help to preserve, to rekindle, or to justify the mandate we have long been tendered to govern ourselves? When this conservative, anti-government president proposes legislative approaches to health problems that threaten to regulate federally—like a public utility—like railroads—we should be listening. The public is trying to tell us something.

The increase in the number of specialists, the expanding technology, and the rise in third-party coverage all are intertwined in the resultant effect on the delivery system and on the validity of changes that the fee-for-service system leads to abuse. Not only has third-party care enhanced the economics of new specialties and emphasized the selection and/or introduction of new procedures, but important effects can be noted on the behavior of the patient. Often, because of what the lawyers call "the moral hazard" of insurance, there is no professional or economic restraint on what is charged. Both parties believed it had already

been paid for in terms of insurance premiums.

Some of you think the American Dental Association is contributing to the dilemma on ethics. After all, we have a marketing service department and we're consulting with constituents, components and individual dentists about how to market their individual practices. If this is symptomatic of the decay inherent in our profession, then we plead guilty! But I suggest to you that ethical behavior thrives—is spoken about, and written about—in times of economic plenty. We all want to sustain an environment which allows a doctor to be a doctor.

Increasing the demand for care is our only option. We have no alternatives. The only way to do this is by effective dental education—prime time dental education. I call it marketing! How do you like that? A discussion of marketing at the American College of Dentists. Is it sacrilege—or relevant? Well, in terms of today's discussion, let me tell you emphatically that the marketing of professional services is ethical. Let's call it prime time dental education—I don't care. But if your ADA doesn't ethically increase the demand for necessary dental care, the resultant vacuum will be filled by entrepreneurs, and by the increasingly crass commercial behavior of our colleagues. No panel discussion will have any effect upon this.

So the times are different—the people really aren't. We respond similarly to forces as we have for centuries. Ethical deviations are symptomatic of broader underlying conditions. The solutions require attacking the conditions. The prospects are not bright. We overwhelm each other with rhetoric and inactivity. Perhaps as a result of this morning's discussion, we will begin to cope in a meaningful way. Δ

Reprint requests to:

Burton H. Press, D.D.S.
University of the Pacific Dental School
2155 Webster Street
San Francisco, CA 94115

A PERSON WITHIN A COMMUNITY OF PERSONS

W. Robert Biddington*
David A. Nash**

In the last several years, there has been a resurgence of interest in teaching professional ethics. Factors influencing this include technological advances that have expanded treatment options; an increased concern for self-determined action; changing patterns of dental disease; the appearance of franchised and entrepreneurial practice settings; the ownership and management of health care facilities by private, for-profit corporations; and the changing relationship of professionals among themselves, with society and with government.

The U.S. Supreme Court decision declaring that the professions were not exempt from antitrust legislation led to the Federal Trade Commission's ruling in 1979 aimed at American Medical Association policies, and in a subsequent derivative decision directing the American Dental Association, to "cease and desist from restricting, regulating, impeding, declaring unethical, or interfering with advertising ... of services."¹ Another factor has been the amelioration of the shortage of dentists² with resultant efforts to promote the professional's services through marketing.³ In a recent *New England*

Journal of Medicine article, Fein⁴ has suggested, "a new language is infecting the culture of American medicine; it is the language of the marketplace, of the tradesman, and of the cost accountant." Changes such as these have resulted in

A new language is infecting the culture of American medicine; it is the language of the marketplace, of the tradesman and of the cost accountant.

dental practitioners viewing the matter of "ethics," somewhat differently. The consequence of such changes are demands from within and without the profession to examine seriously the relationship of dentists to one another, to their patients, and to society.

Confusion frequently exists between morality and ethics. For the purposes of this presentation, I wish to distinguish between the two, even though the terms are frequently used interchangeable. Ethics, as I understand it, is the "science of the moral."⁵ Ethics is the philosophical reflection and deliberation behind the moral. Ethics is the "theory of the moral." On the other hand, morality is to be concerned with human behavior that relates people responsibly to other people. It is unfortunate that

"morality" has become burdened with a sense of graceless legalism, and in many instances with a sexual connotation. Possibly this is the reason many have substituted the word ethics for morality ... to avoid negative implications. Moral behaviors are those actions that can have good or bad consequences and can, therefore, be evaluated as being right or wrong using reasoned, objective criteria. Paul Tillich has suggested that there is a moral imperative for humanity "to become what one potentially is, a person within a community of persons."⁶ It is this moral imperative and its relationship to the enterprise of dental education that I wish to explore today.

The dentist assumes a unique moral role of benefitting society as a professional, "**a person within a community of persons,**" if you will. However it must be unequivocally stated and understood that fundamental to the unique obligations of the profession, there is a basic human morality to which we must adhere in concert with all members of society. Many have attempted to explain this normal everyday morality.⁶ It is beyond our scope to do so today. It requires stating however, that universal natural moral rules, such as don't kill, don't cause pain, don't deprive one of his or her freedom or opportunity, and the like, are essential obligations of all

*W. Robert Biddington, D.D.S., Dean

**David A. Nash, D.M.D., School of Dentistry, West Virginia University.

persons, including dentists, stemming from our participation in the human enterprise. Essential to these prohibitive human actions is an inclination or intention to follow them. Morality then is not only answering the question of, "what should I do, or not do?" but in the Aristotelean sense, "who should I be?" Many are familiar with the Christian tradition in which Jesus states the essence of morality as "love your neighbor as yourself."⁷ In fact, love, as agape, has been suggested by Christian and non-Christian ethicists, as a basis for ethics when properly understood.^{5,8,9} An obvious application being, treat the patient as you would want to be treated.

It is unfortunate that some members of our profession and many members of society, have come to believe that the moral life is value-laden and so relative as to make no reasonable demands upon them personally. After all, "it all depends on your perspective." Such an attitude may partially be due to our failure to place sufficient emphasis on educating the whole person. Some practitioners view morality as being optional, limited to those who desire to be virtuous or religious. This is not acceptable. The keeping of moral rules, and the life of morality is essential to cooperation among people, "**being a person in a community of persons,**" in order that all may have the maximalization of the good and the minimalization of the evil.

As dentists, we assume role-responsibilities when we enter the profession and "profess" to "do good" for society with regard to oral health. Time does not permit a complete delineation of these responsibilities. Nash discussed them in a soon-to-be-released article, "The Ethics of Profession in Dentistry,"¹⁰ and summarizes the dentist's role-responsibilities as being:

1. The duty to conduct one's professional life in accordance with the ethical principles rooted in the moral rules,

these principles being: beneficence, autonomy, and justice.

2. The duty to recognize the reciprocity of relationship which exists with society, and the derivative duty of covenantal fidelity. (contractual obligation)
3. The duty to maintain knowledge and skill through continued learning.
4. The duty to participate in the professional community in order to ensure a just distribution of society's resources and to share the burdens of professional self-regulation.

Ethics instruction in the dental curriculum is essential in order to translate broad ethical principles to concrete dental situations.

There are those in society including our keynote speaker, Dr. May, who suggest that a moral problem currently exists in the professions. The Executive Director of the American Association of Dental Schools, Dr. Harry Bruce, stated in an article entitled, *Time to Change*, "we now find ourselves accused, rightly or wrongly, of using our licenses to exact exorbitant fees, of not caring for the needy and the elderly, and in general, of having lost much of our humanism."¹¹ In the early part of the century, Abraham Flexner said, "professional groups tend to view themselves as organs contrived for the achievement of social ends rather than bodies formed to stand together for the assertion of rights or the protection of interests or principles."¹² He went on to say that such advancement of common social interest was the obligation of a profession, stating that "professionalism represents a quality of conduct that not only requires superior knowledge, skill and

judgment, but requires that those be used for the benefit of others or of society, prior to any consideration of self interest. He further stated that "as professionals, our primary interest is the dental health of the public we serve."¹¹ Many are suggesting that today, benefitting others has taken a decided second-seat to self-interest. Dr. May has quoted one radical critic as saying "the professions are poisonous."¹³ George Bernard Shaw expressed this sentiment when he said, "all professions are conspiracies against the public."¹⁴

There are those that believe a case can be made for the profession of dentistry, for not having abused the confidence and trust granted by society, or to use Dr. May's terminology, for "not having been faithful to its covenant." Obviously, there are strong voices who do not share such an assessment. Therefore, it is incumbent upon the community of educators who I represent, to increase our efforts and become more vigorous as "overseers" of the professional socialization or professional maturity of our future generations of practitioners. We must emphasize by our words and in our actions that our profession holds a public trust and a trust for which we must be accountable. "The profession is judged by the behavior of individuals within the profession."¹¹ Those who enter the profession under our care, our students, must be made cognizant of the demands of morality on them as members of society and the unique commitment to specific behaviors they must assume in becoming a part of the dental profession.

It is to this end that I submit the following four recommendations for the consideration of the educational community.

First, as a part of the student's baccalaureate preparation, I suggest that formal courses in philosophy generally, and ethics specifically, should be included among those subjects that are strongly recommended for admission to dental school. Some would argue

that morality is determined in the home and that university courses in ethics come too late to be of benefit. Possibly, but an argument can be made for those educational experiences that sensitize the student to issues of the moral to which previously they may have given little thought. Callahan in his "Goals in the Teaching of Ethics"¹⁵ terms

Some practitioners view morality as being optional, limited to those who desire to be virtuous or religious. This is not acceptable.

behavior changes as a "doubtful and inappropriate" goal of ethics instruction; however, he suggests that there are five alternative goals. These are:

1. to stimulate the moral imagination
2. to develop the ability to recognize ethical issues
3. to develop analytical skills
4. to elicit a sense of moral obligation, and
5. to promote the tolerance of ambiguity and disagreement

Callahan further states that, "at the very least, courses in ethics should make it clear that there are ethical problems . . . and that there are better and worse ways of trying to deal with them." Certainly formal courses in philosophy and ethics will provide the student with the conceptual tools to participate in moral reasoning and ethical reflection. Kohlberg¹⁶ in his psychological work on moral development has stated that the "major impetus for movement through the moral stages (from the less adequate lower stages to the more adequate higher stages), is the person's activity as a problem-solver, as called forth by challenging interactions with the environment." I am of the opinion that course-work in ethics can have a significant impact on the students moral development intellectually.

As a second recommendation, I concur with Bill May, who in his paper, "Professional Ethics: Setting, Terrain and Teacher,"¹³ argues that instruction in ethics is essential in the professional curriculum. Odom,¹⁷ found that as of 1981, that 25% of our schools of dentistry did not offer classroom instruction in ethics and that in the other 75%, ethics frequently was integrated with jurisprudence and practice administration. His review of the dental literature in ethics revealed a paucity of writing in the field. I firmly believe that ethics instruction in the dental curriculum is essential in order to translate broad ethical principles to concrete dental situations, providing the opportunity to discuss moral and immoral alternatives; such moral problem-solving serving as a means of challenging the moral development of the student dentists. Ethics instruction allows us to demonstrate to the dental student the pervasiveness of mortality in our professional activities. Most everything we do has potential for good or evil consequences and can therefore be labeled right or wrong. I especially like Bill May's quote of Samuel Johnson when he said "we are all moralists perpetually, geometers only by chance."¹³ **Ethics** in dentistry should be taught in the classroom and in seminar sections by dentists with the education and charisma to share philosophic insights and to lead reflective discussions of students. **Morality** must be taught by all faculty in their every instructional encounter with the student. Glen Robinson, Assistant Dean at the University of Mississippi, has said, "The effective teacher will respond to sensitive situations (those regarding the professional role), by prodding the student toward personal and professional maturity."¹⁸ The importance and need for faculty in all teaching situations, the classroom, laboratory and clinic to be constantly involved in teaching the ethics of the profession leads to my third recommendation.

Faculty development programs

should be instituted whereby dental faculty themselves become more sensitive to moral dimension of life and practice. Bloom¹⁹ suggests attitudinal development is best taught by "modeling" appropriate attitudes and corresponding behaviors. Harry Bruce says, "call it 'hero worship' if you will, but admiration and emulation play an important role in the shaping of the professional. If each dentist (or teacher) were to act as though he or she were the role model for another practitioner (or student), the future of the profession would be secure."¹¹ We as faculty must be moral and committed to the moral life of the profession, believing that such a commitment contributes to the "actualization of our centered-self;"⁵ becoming what we potentially are, "**a person within a community of persons.**" We must view our commitment to the dental health of the public as that which helps provide ultimate meaning for our existence. Both Erich Fromm⁹ and Viktor Frankel²⁰ have called attention to *the* existential question of the contemporary person, "to

The hallmark of the true professional is said to be integrity.

have or to be?" Many of our young student dentists chose dentistry in order that they might "have" a career in which they are independent, and have financial success and leisure time. Rollo May²¹ has suggested this orientation to "having" has estranged us from basic human values and threatens our professionalism. He suggests that success is not defined by wealth, prestige, or even expertise, but is defined in terms of the ability to apply technology with integrity. The hallmark of the true professional is said to be integrity. Human existence is fundamentally a striving for wholeness. It is not inappropriate for we who teach, hopefully from mature perspectives, to

direct the attention of our students by our lives and words, to dentistry as a "vocation, a calling, if you will, in which to find a meaningful expression for our life—to be."

I offer one final recommendation on ethics strategy for dental education. Ethics is a relatively circumscribed subject within the broad arena we know as the humanities. I believe we must establish ambitious programs in the humanities as an identifiable component of the dental curriculum. Certainly teaching humanities does not make one more humane, just as teaching ethics does not of itself make one more ethical. But, as Dr. Enid Neidle has suggested in her article, "Dentistry—Ethics—Humanities: A Three Unit Bridge,"²² we can agree "the intellectual and scholarly activities of history and philosophy, the study of civilization and culture, the learning of music, languages, and classics, are essential to the development of the human spirit and man's understanding of his creative potential"—**"to become what one potentially is, a person within a community of persons."** President Sawhill of New York University has said that to train dentists without providing them with this background of the humane is to "run the risk of creating technicians, unable to make creative judgments, unable to place their experiences in the context of the social, political, and economic world, and unable to recognize their own spiritual place in the universe."²³

I believe our profession of dentistry has made measured strides in its evolvement through the years. Many of our advances have been the result of the academic community's commitment to change; to growth and development. As educators, we must now continue to lead in helping to improve the weave of the fabric between society and our profession by doing all within our power to see that professionals of the future are not only *good dentists, but good people!*

I conclude by adapting a comment of Dr. Edmund Pellegrino

from his book, *Humanism and the Physician*:

The need for a recasting of the profession is implicit in the disquietude expressed by many patients who call for a more humanistic profession... a profession with a spirit of sincere concern for the centrality of human values in every aspect of professional activity. A concern that focuses on respect for the freedom, dignity, worth and belief systems of the individual person, and a sensitive, non-humiliating and empathetic way of helping.

May the members of our profession, be they educators, practitioners, researchers or administrators, respond to the moral imperative and become what each of us potentially is, **"a person within a community of persons!"** △

References

1. American Medical Association, Connecticut State Medical Society, New Haven County Medical Association, United States of America, before the Federal Trade Commission. *Docket 9064*, October 12, 1979.
2. Striffler, D.F., Young, W.O., and Burt, B.A., *Dentistry, Dental Practice and the Community*, pp. 427-440, Third Edition. Philadelphia: W.B. Saunders, 1983.
3. *Dental Marketing Planner, Building and Maintaining a Successful Dental Practice*, Chicago: American Dental Association, 1983.
4. Fein, R., "What is Wrong With the Language of Medicine?" *New England Journal of Medicine* 306:14 (August 8) 863-864, 1982.
5. Tillich, Paul, *Morality and Beyond*, New York: Harper and Row, 1963.
6. Gert, B., *The Moral Rules: A New Rational Foundation for Morality*, Harper Torchbooks, New York: Harper and Row, 1973.
7. *The Bible*, Mark 12:31.
8. Fletcher, J., *Situation Ethics: The New Morality*, Philadelphia: Westminster

Press, 1966.

9. Fromm, E., *The Art of Loving*, New York: Harper and Row, 1956.
10. Nash, D.A., "The Ethics of Profession in Dental Medicine," *Health Matrix*, Winter, 1983.
11. Bruce, Harry W. "Time to Change," *J. Dental Education* 44:634-641, 1980.
12. Flexner, A., "Is Social Work a Profession?" an address before the National Conference of Charities and Corrections, Baltimore, May 17, 1975. *School and Society* 1:26 (June) 901-911, 1915.
13. May, W.F., "Professional Ethics: Setting, Terrain, and Teacher," in *Ethics in Higher Education*, ed. Callahan, D. and Bok, S., pp. 205-241, spec. p. 236, New York and London: Plenum Press, 1980.
14. Shaw, G. B., *The Oxford Dictionary of Quotations*, 3rd. edition, p. 496, New York: Oxford University Press, 1979.
15. Callahan, Daniel, "Goals in the Teaching of Ethics," in *Ethics Teaching in Higher Education*, Hastings-on-the-Hudson, New York: The Hastings Center, 1980.
16. Kohlberg, L. *Collected Papers on Moral Development and Moral Education*, Cambridge, Massachusetts: Laboratory of Human Development, Harvard University, 1973.
17. Odom, John G., Formal Ethics Instruction in Dental Education, *J. Dent. Educ.* 46:553-557, 1982.
18. Robinson, Glen E., Confrontation and the Professional Maturation of Dental Students, *J. Dent. Educ.*: 159-162, 1975.
19. Bloom, Benjamin S., Hastings, J. Thomas, Madaus, George F., *Handbook of Formative and Summative Evaluation of Student Learning*, New York, 1971.
20. Frankel, V. *The Will To Meaning*, New York: New American Library, 1969.
21. May, Rollo, *Man's Search for Himself*, New York: Norton, N.W., 1953.
22. Neidle, E., Dentistry—Ethics—The Humanities: A Three Unit Bridge, *J. Dent. Educ.* 44:693-696, 1980.
23. Pellegrino, Edmund, *Humanism and the Physician*, Knoxville: University of Tennessee Press, 1979.

Reprint requests to:

Dr. W. Robert Biddington, Dean
School of Dentistry
West Virginia University
Morgantown, W.V. 26506

THE PHYSICIAN'S COVENANT: IMAGES OF THE HEALER IN MEDICAL ETHICS*

William F. May, Ph.D.**

Chapter V: Teacher

Chapter V: "Teacher" is reprinted from pages 145-150 from *The Physician's Covenant: Images of the Healer in Medical Ethics*, by William F. May. Copyright © 1983 by William F. May. Reprinted and used by permission of The Westminster Press, 925 Chestnut Street, Philadelphia, PA 19107 (Available at \$10.95 plus \$1.00 handling and shipping).

The Covenantal Image, alone among the major images treated in this book, demands that healers teach their patients. Other images—those of parent, technician, fighter, and contractor—may do so incidentally, but at best they usually generate ambivalence toward the teaching function.

The parental image tends to reduce patients to dependent children, stricken sheep. Compassionate care and vicarious decision-making rather than candid instruction characterize the professional's task. Only too often, parentalist healers, like Dostoevsky's Grand Inquisitor, have a low estimate of their charges and want to protect them from that

*Abstracted from "The Physicians Covenant" by William F. May, The Westminster Press, Philadelphia, 1983, pp 145-150. Permission for abstracting granted by Westminster Press, January 12, 1984.

**Joseph P. Kennedy, Sr., Professor of Christian Ethics
Kennedy Institute of Ethics
Georgetown University
Washington, D.C.

turmoil which knowledge and freedom entail.

The location of many teaching hospitals and residency training programs in the inner city tends further to convince young professionals that preventive medicine and the teaching it requires are activities of low yield. Residents complain that patients often come in only when their diseases flare. Preventive medicine seems beside the point. Destructive habits so grip the patient as to make rehabilitation or stable chronic care difficult to sustain. After treatment, patients go back into the streets and fall into the same injurious habits again. They forget appointments; they don't comply with a regimen. Patients will say: "I don't know what medicines I take. It's in the chart. Read the chart". But the resident knows that the chart records what the physician prescribed, not what the patient is taking, if anything. Further, patients fear the truth or fail to assimilate it, or accept it but selectively. Some pounce on the bad news and panic; others dissolve the bad news in a blurry confusion and ignore the importance of compliance. In response, physicians retreat into a limited parentalist mode, making decisions on behalf of the patient in the sanctuary of the hospital, knowing that the world beyond the hospital walls will shortly defeat their child-

like charges. Thus, early in their education physicians come to expect very little from patients. Cynicism, despair, and sometimes resentment infect the exhausted resident.

And yet—even parentalism offers some moral warrant for teaching one's patients. The parent, after all, is committed to the being and well-being of the child, and the good parent recognizes education as an important ingredient in the child's flourishing. The main thrust of the image, however, condescends too much to encourage persistent teaching. Give what care you can to hurting charges and let it go at that.

To the degree that practitioners think of themselves only as contractors dispensing technical services they will also tend to depreciate the place of teaching in therapy. Contracted for and paid on a piecework basis, whether by the consumer personally or by a third-party payment system, the therapist offers discrete, itemizable services rather than taking continuous responsibility for the patient's improvement in self-care and health maintenance. Teaching takes time; it reduces the number of patients the physician can see; it complicates the question of patient management and exposes the physician to the possibility of making personal as well as technical errors. Both the specialist and the generalist can draw back from teaching the patient—the specialist offering encoded information to the attending

physician, and the attending physician sometimes reneging on the task by defining himself or herself chiefly as the orchestrator of technical services. And yet the contractualist model retains a fragment of the teaching responsibility, to the degree that the seller of services accepts responsibility to inform the buyer about the services and the product offered for sale. Further, Health Maintenance Organizations (HMOs) draw up contracts with their parents that give professionals financial incentives to teach better.

The military model hardly emphasizes the physician as teacher. It conjoins the technical and contractual models with an adversarial setting to produce the mercenary who fights against disease and death. The patient has fallen victim to invasive powers. Amateurs mucking about with weapons that they hardly understand will only blow themselves up. A little knowledge is a dangerous thing. The expert in biological warfare should

The parental image tends to reduce patients to dependent children, stricken sheep.

decide which drugs best counter the intricacies of the enemy's attack, its time, its place, and its force. Besides, under the conditions of battle, with the physician fighting on behalf of a thousand little principalities, explaining wastes time.

Both the economics of medicine and the structure of medical edu-

cation reinforce the tendency of physicians, who live by the technical-contractualist-military models, to neglect teaching. The third-party payment system rewards physicians for discrete, piecemeal services to the sick. It does not reward them for teaching patients how to maintain their health or even for securing high levels of compliance with the doctor's regimen. Not surprisingly, a President's Committee on Health Care Education reported for 1973 that only one half of one percent of annual health care expenditures went for health education.¹ While HMOs make a good-faith effort to redirect the economic incentives toward preventive medicine, the high turnover rates of patient subscribers in HMOs (30 percent per year) do not suggest that those organizations have succeeded in giving the professional much financial incentive to practice pedagogically persuasive preventive medicine.²

Neither medical school education nor residency training programs prepare physicians adequately for teaching. Professional education prepares them as depositories of information, not sharers of what they know. "Medicine is the only graduate school to rely on multiple choice examinations," complains one academic physician.³ Sadly enough, this subarticulate standard of testing fails to challenge the student to organize and teach effectively, or even to retain what he or she knows. According to a study of a second-year class at a distinguished medical school, the half-

life of a retained factual item is about three weeks; 90 percent of factual items retained for true-false examinations have taken flight by graduation.⁴

Both the economics of medicine and the structure of medical education reinforce the tendency of physicians . . . to neglect teaching.

Cumulatively, a professional education that centers in the mere acquisition of factual information converts education itself from a public trust to privately held property. The student soon assumes that he or she has acquired knowledge as a private stockpile of goods to be sold wholly as the certified possessor sees fit. The information that lab tests, X-rays, and biopsies yield belong to the professional rather than to the patient whose destiny they foretell. And patients often submit to this view. They would feel as shy about reading the physician's workup of their case—while he or she is out of the office—as about reading any other papers or letters on the desk. Such information seems like private property, for the physician alone to divulge. Thus the very terms of professional education and clinical training and practice combine to obscure the communal origins of professional education and the duty to share generously what one knows.

The quarrel in medicine over whether physicians should teach their patients is not new; it dates

back to the classical world. The "rough empirics" in ancient Greece (who, familiar with treatments but not with the scientific reasons for their success, practiced largely on slaves) used to ridicule the more scientifically oriented physicians (who, practicing largely on free men and their families, sought to teach their patients). The scientific physicians complained that the em-

The third-party payment system rewards physicians for discrete, piecemeal services to the sick. It does not reward them for teaching patients how to maintain their health . . .

pirics offered little more than what Lain Entralgo has called a veterinary practice on men. But the empirics argued that patients don't want to become doctors, they want to be cured.

Modern technicians have argued a *fortiori* that the knowledge base of medicine has grown so complicated as to make the effort to teach patients today even more futile than in ancient Greece. Physicians do not share a common scientific understanding with even their most educated patients. The knowledge explosion has produced in our time a fallout of ignorance. And since knowledge confers power, the ignorant, to the extent of their ignorance, become powerless. For better or worse, patients can only submit themselves to the superior knowledge, authority, good intentions, and technical ingenuity of the doctor.

And yet, modern technology itself has allowed us in many respects to break with the understanding of disease that heretofore has minimized the teaching role of the healer. Traditionally interpreted, disease seemed to erupt episodically, breaking health and suspending the normal discretion that the patient exercises over his or her life. Upon falling ill, one surrenders one's natural authority until, through the mysterious interven-

tions of the physician, a return to the normal world becomes possible. As the analogy would have it, disease disrupts health the way war interrupts peace. This irruptive and episodic account of disease, however, overlooks what Horacio Fabrega of Michigan State University has called the processive character of both disease and health.⁵ Long before symptoms appear, the cardiovascular system may be preparing for catastrophe. A processive understanding of the disease (which sophisticated monitoring devices makes accessible to the modern practitioner) argues for a more collaborative interpretation of the physician-patient relationship. The physician must function as teacher, sharing information with the patient and engaging the layperson more actively to maintain good health. The professional charged with care needs to serve as more than a technician; for technology itself provides the physician with early warning of diseases that may respond to professionally assisted self-care.

The covenantal image for the health care practitioner pushes the profession unequivocally in the direction of teaching. To the degree that physicians and institutions accept a covenantal responsibility for the being and well-being of their patients—above and beyond the delivery of technical services—they must engage in the delicate busi-

The prevention of disease, the recovery from a siege of illness, and the successful coping with chronic conditions require . . . the reconstruction of life-styles.

ness of transforming their patients' habits. The prevention of disease, the recovery from a siege of illness, and the successful coping with chronic conditions require, in one form or another, the reconstruction of life-styles. Whenever healers engage in these activities, they transform rather than merely transact. They do not simply offer services to

satisfy the wants and wishes of people as they are; they engage in transforming commitments, priorities, and life rhythms.

But any professional effort to transform patients flirts with danger. It can quickly deteriorate into a puritanical officiousness—a runaway parentalism—unless teaching becomes its chief instrument. Teaching offers one of the few ways in which one can engage in transformation while respecting the patient's intelligence and power of self-determination. Good teaching depends not only upon a direct grasp of one's subject, a desire to share it, and some verbal facility, it also requires a kind of moral imagination that permits one to enter into the life circumstances of the learner: to reckon with the difficulties the learner faces in acquiring, assimilating, and acting on what he or she needs to know. Good teachers do not attempt to transform their students by bending them against their will, or by charming them out of their faculties, or by managing them behind their backs. Rather, they help them see their lives and their habits in a new light and thereby aid them in unlocking a freedom to perform in new ways.

Teaching has a place in medical practice across a broad spectrum of activities. Obviously, preventive, rehabilitative, chronic, and terminal care include a teaching component. Δ

References

1. Carter L. Marshall, "Prevention and Health Education," in MAXCY-ROSENAU PUBLIC HEALTH AND PREVENTIVE MEDICINE, 11th ed., ed. by John M. Last et al. (Appleton-Century-Crofts, 1980), pp. 1114-1115.
2. Duncan Neuhauser, "Don't Teach Preventive Medicine: A Contrary View," PUBLIC HEALTH REPORTS 97 (May-June 1982):222.
3. Ibid., p. 221.
4. Ibid.
5. Horacio Fabrega, "Concepts of Disease: Logical Features and Social Implications," PERSPECTIVES IN BIOLOGY AND MEDICINE 15 (Summer 1972):605-615.

PROFESSIONAL ETHICS IN DENTAL RESEARCH

William D. McHugh*

In 1932, the United States Public Health Service started a study in Macon County, Alabama to determine the course of untreated latent syphilis.¹ To this end, 400 black men with syphilis and 200 uninfected black men were recruited from this poverty-stricken rural area. These men were induced to take part in the study by the promise of treatment, and of transport to town and hot meals on the days they were to be examined. There is no record of their being advised of the purpose or details of the study or of their consent being sought.²

The study continued for forty years during which time the subjects were examined periodically. Active steps were taken to keep these men from treatment and they were given placebos such as "spring tonic" and ineffective ointments. Even when some of the subjects were drafted into the army in 1941, PHS officials identified them and asked that they not be given treatment; and this request was agreed to.²

A series of reports of this study appeared in the medical literature from 1936 onwards without any apparent reaction until accounts in the public press led to an enquiry by a panel set up by the Department of Health, Education and

Welfare in 1972. This panel concluded that the study was "ethically unjustified" and that the subjects should have been given penicillin when it became generally available, and when its value as a therapy for syphilis was demonstrated in the early 1950s. The study was then terminated and the surviving subjects were given treatment—but no other compensation for what had happened!

74 of the men were still alive in 1972 when it was estimated that at least 28, and probably over 100, had died from the direct effects of advanced syphilis, and that twice as many of the syphilitic group had died as in the control group. Nevertheless this study added much to the understanding of the natural history of syphilis, and especially of its effects on the cardiovascular system.^{3,4}

Another interesting study was started in Sweden in 1945 to determine the dental effects of various types of dietary carbohydrate supplements.⁵ A total of 436 subjects with an average age of 32 years were selected from the inmates of the Vipeholm Hospital. All had moderate to severe mental deficiency, many could not feed themselves, and only 82 of the 436 could brush their teeth. They were divided into groups and their basic diet supplemented with fat, sucrose, chocolate, or up to 24 large candies per day. Dental and other examinations were conducted pe-

riodically and, when it was found after two years that the subjects who consumed 24 large toffees each day had developed rampant caries, their candy supplements were withdrawn. This classic study demonstrated conclusively that between-meals consumption of carbohydrates, especially those that stick to the teeth, promotes dental caries.

While it is always dangerous to judge past events by the moral and ethical standards of today, there is no doubt that we would all now consider these two studies to be unethical and would never repeat them. While both did yield important scientific information of value to mankind, both exposed their subjects to the ravages of disease. Also, in neither study was any effort made to obtain the "informed consent" of the participants.

My reason for mentioning these studies is not to criticize them but to provide a baseline against which we can measure the changes which have taken place in the ethics of dental and medical research over the past 20 or so years. Let me give you a less-dramatic but more familiar example of the changing pattern.

When the use of various fluorides in toothpastes, mouthwashes and gels was first tested, groups of matched subjects were carefully selected and one group was given the fluoride-containing test agent

*Dr. William D. McHugh, Director, Eastman Dental Center and Associate Dean, University of Rochester, N.Y.

while the placebo control group was given the same material without the fluoride. Many such clinical trials were carried out and formed the basis of claims that "agent X" or "product Y" reduced caries by 35% or whatever. Studies with this design are not considered ethical today, however, since subjects in the control group are being deprived of an agent which is known to have therapeutic value. Now, any new treatment must be measured against the current treatment standard, if one is available. While this ensures maximum benefit to all subjects participating in a clinical trial, it greatly increases the difficulty and the cost of demonstrating a significant effect. Improvements tend to be made in small increments rather than giant steps, and to demonstrate that a modest improvement is real rather than a statistical aberration requires a large study with many subjects lasting a relatively long time. Our ethics and procedures for clinical testing have thus changed greatly in a relatively short time.

Regulation and Legislation

Virtually all clinical research is controlled today by laws or regulations. The most influential of these are the Federal regulations for the Protection of Human Research Subjects. These apply to institutions in receipt of Federal funds for research or other purposes and this

includes virtually all universities, colleges, hospitals and other such institutions. Since companies producing products intended for therapeutic use in man must obtain approval from the Federal Food and Drug Administration before

Professional ethics are . . . but a reflection of the moral and social values of society as a whole

these products can be marketed, they too are obliged to follow these same regulations. The regulations were substantially revised in 1981 following the Belmont report.⁶ While they are extensive and detailed, they are relatively simple in concept. The regulations set out ethical principles and guidelines for the protection of human subjects of research. These focus attention on the safety and well-being of the experimental subject although some risk to the subject may be allowed if the counterbalancing benefits are substantial. The regulations require "informed consent" from experimental subjects or, in the case of children or the mentally handicapped, others who are properly responsible for their welfare. Finally, all proposals for research involving human subjects must be reviewed by an "Institutional Review Board" and the study may not

start without its prior approval. These Boards have a broadly representative membership and in Eastman Dental Center, our Board currently consists of 3 dentists, a pediatrician, an attorney, a research chemist and a dental hygienist who is also a nun. All are volunteers. Committee members review all research proposals keeping the patients' or subjects' interests paramount and focus particularly on safety and on ensuring that subjects are fully informed, in language that they can understand, about the purpose of the study, all procedures involved, and any risks and benefits to them.

While Institutional Review Boards could be viewed as restrictive and regulatory in nature, my experience is that they take a constructive and facilitative approach. Committee members often make helpful suggestions on how the study design can be improved, how volunteer subjects can be recruited by making the project more attractive to them, and how procedures for informed consent can be improved. This often involves simplification of consent forms with substitution of less technical language than the investigators had originally chosen.

Research in Private Practice

While the majority of clinical research originates from univer-

sities and other such institutions, a substantial amount does take place in the private practice setting. This applies particularly to the development of new technics, materials and devices. While the same federal regulations do not necessarily apply to such clinical studies, the principles underlying them should and indeed do.

Thus it is incumbent upon any dentist involved in such research to ensure that the safety, health and wellbeing of the patient remain paramount. The first requirement is that the experimental material or procedure has been shown by all necessary and appropriate laboratory and animal tests to be non-toxic and safe for human use. Where a drug or therapeutic agent is involved, this must either be fully approved by the Food and Drug Administration or accepted by that Agency as an "investigational new drug". Next it is important that the patient be clearly informed, in writing, of the nature of the experiment and any risks and benefits. If this is not done, it would be difficult to defend a suit for malpractice. Finally it is usual and ethical to allow the patient to withdraw from the study at any time, without prejudice of any sort, and to ensure that if the treatment or material fails, alternative treatment with traditional materials and methods is provided at no cost to the patient.

Professional ethics are, of course, but a reflection of the moral and

social values of society as a whole, and the changes in ethics have paralleled the shift in the relationship between the clinician and the patient. Virtually gone are the days of the paternalistic professional who decided on the choice and course of treatment, with the patient as a largely passive beneficiary. Patients today generally perceive themselves as engaged in an active participatory collaboration towards mutually defined goals. They want information on their condition, the alternatives for treatment—or no treatment, and on the economic and other implications of the various choices. In the end, they want to be actively involved in the decision and expect to be given the information necessary for informed judgment. Similarly, in ethical research, we must fully inform the patient about the details and objectives of the project, the level of safety of the agent or procedure, and any dangers or benefits which may accrue.

This College and the American Dental Association have clearly enunciated principles of ethics and all Fellows pledge to uphold these at the time of their induction. Not only does ethical behavior achieve its primary purpose of benefitting our patients, but it increases public respect for our profession and helps make us proud to be dentists.

Good ethics are no more than common sense and follow from the admonition that we should "do

unto others as we would have them do unto us". More than a century ago, the famous French physiologist, Claude Bernard, expressed it rather well when he said, ". . . among the experiments that can be tried upon man, those that can only harm are forbidden, those that are innocent are permissible, and those that do good are obligatory."⁷ Δ

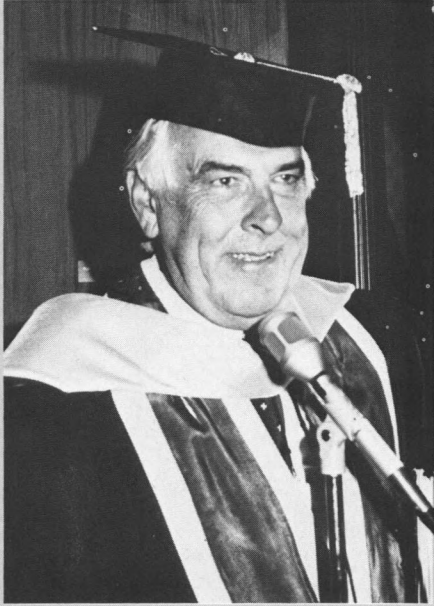
References

1. Vonderlehr, R.A. *et al.* Untreated syphilis in the male negro. *J. Vener. Disease Inform.* 17:260-265, 1936.
2. Brandt, A.M. Racism and research: The case of the Tuskegee syphilis study. *Hastings Center Rep.* 8:21-29, 1978.
3. Olansky, S.; Schuman, S.H.; Peters, J.J.; Smith, C.A. and Rambo, D.S. Untreated syphilis in the male negro: 20 years of clinical observation of untreated syphilitic and presumably non-syphilitic groups. *J. Chronic Dis.* 4:177-185, 1956.
4. McDonald, C.J. The contribution of the Tuskegee study to medical knowledge. *J. Natl. Med. Assn.* 66:1-7, 1974.
5. Gustafsson, B.E.; Quensel, C.E.; Lanke, L.S.; Lundquist, C.; Grahnén, H.; Bonow, B.E. and Krasse, B. The Vipeholm dental caries study. *Acta odont. Scand.* 11:195-366, 1954.
6. Department of Health, Education and Welfare: Protection of Human Subjects. *Federal Register*, January 26, 1981.
7. Bernard, C. An introduction to the study of experimental medicine (1865). Translated by Henry C. Green. *Dover Publ.*, N.Y., 1957.

Reprint requests to:

Dr. William H. McHugh, Director
Eastman Dental Center
625 Elmwood Avenue
Rochester, N.Y. 14620

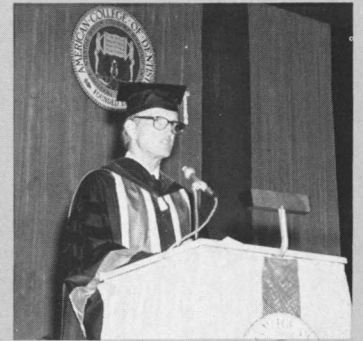
1983 Convocation Anaheim, California



Regent Paul S. Butcher, Convocation
Marshal

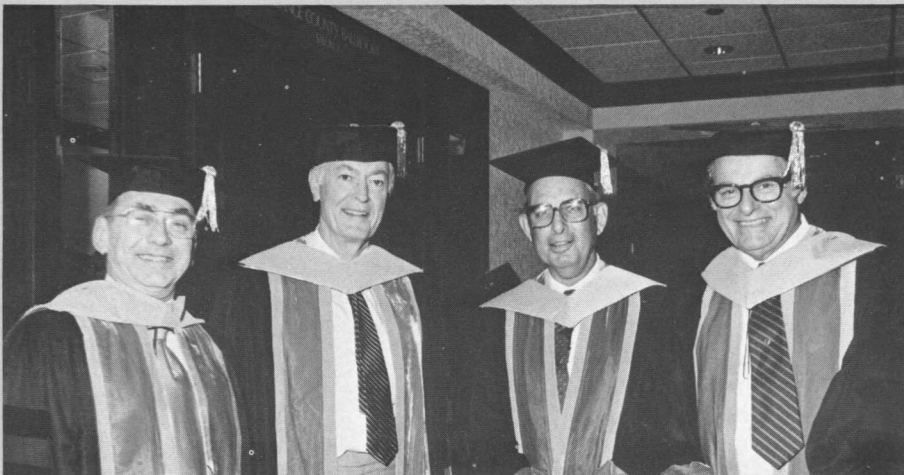


Above, left to right, Leslie E. Christensen,
Mace Bearer, Marshal Paul S. Butcher and
Torch Bearer, Former Regent Leon Ashjian

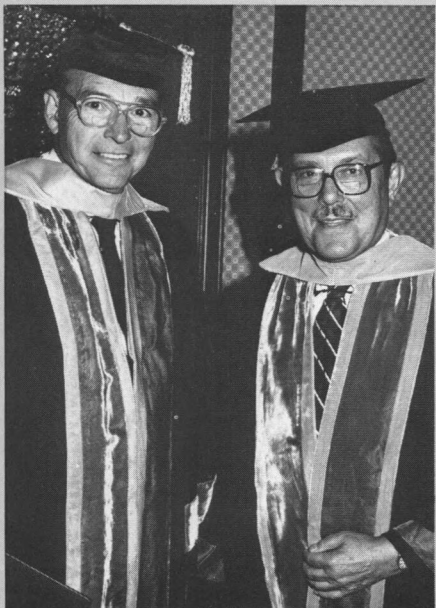


Right, Executive Director
Gordon H. Rovelstad

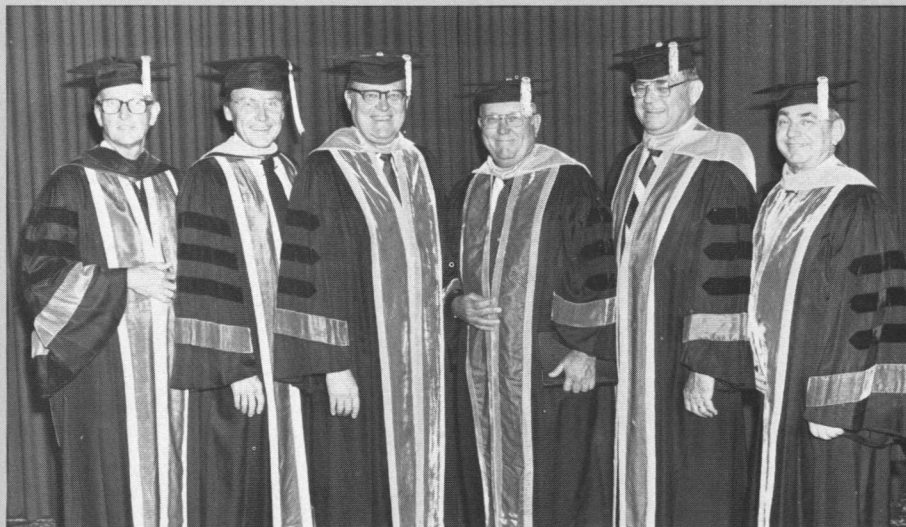
Below, left to right, Treasurer Robert W.
Elliott, Jr., Regent Leo E. Young, Regent
Sumner H. Willens and Regent Albert
Wasserman



U.S. Senator David Durenberger



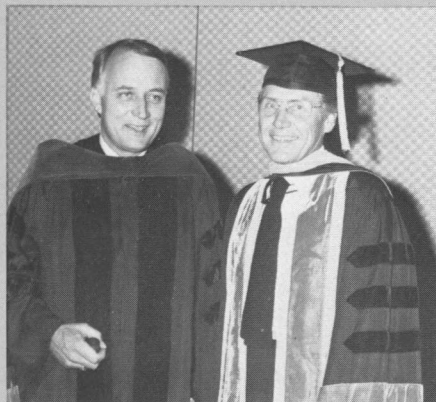
Regent H. Curtis Hester, left, and Gies Awardee Robert I. Kaplan



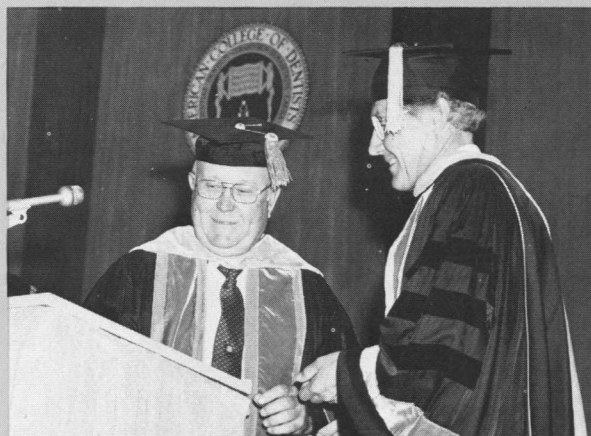
Officers of the American College of Dentists, left to right, Executive Director Gordon H. Rovelstad; outgoing President Odin M. Langsjoen; Vice President Norman H. Olsen; incoming President Lyndon M. Kennedy; President Elect Charles W. Fain, Jr. and Treasurer, Robert W. Elliot, Jr.



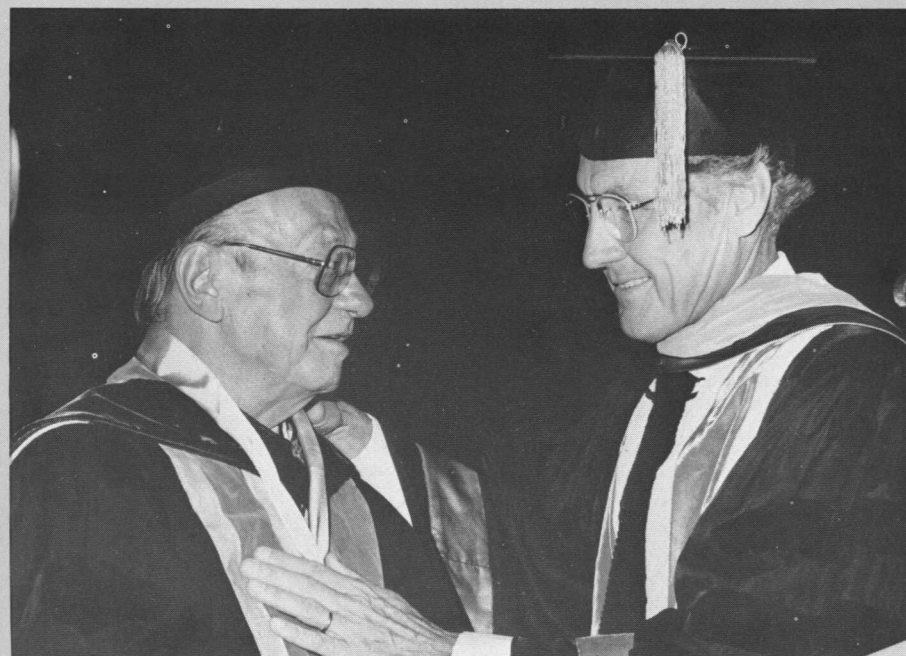
Flag Bearer Carl E. Rieder, left and Mace Bearer Leslie E. Christensen



Convocation speaker U.S. Senator David Durenberger, left, and President Langsjoen



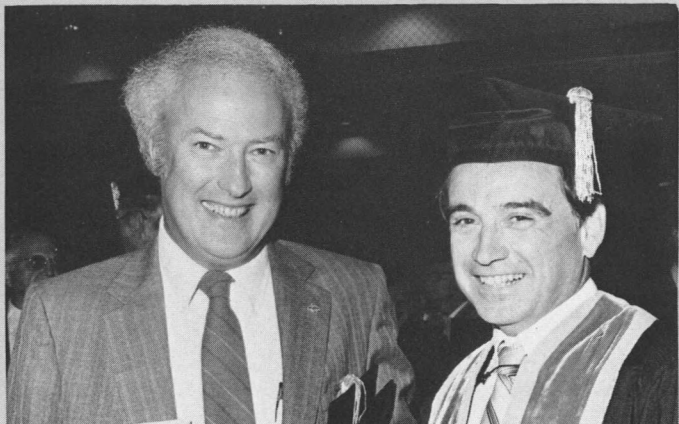
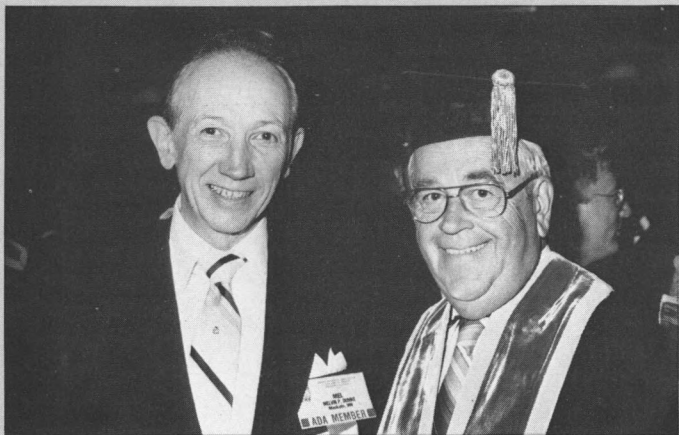
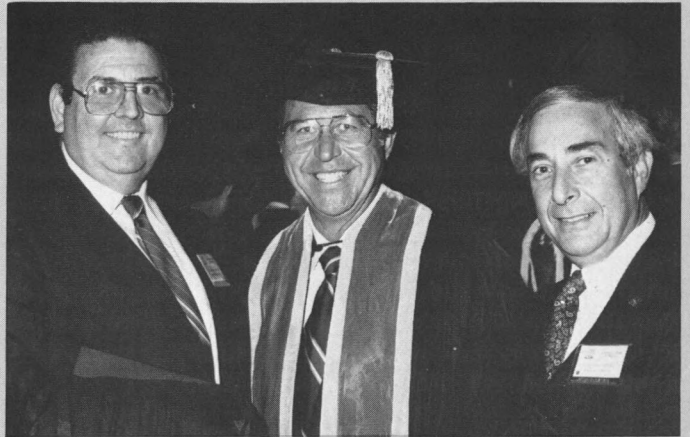
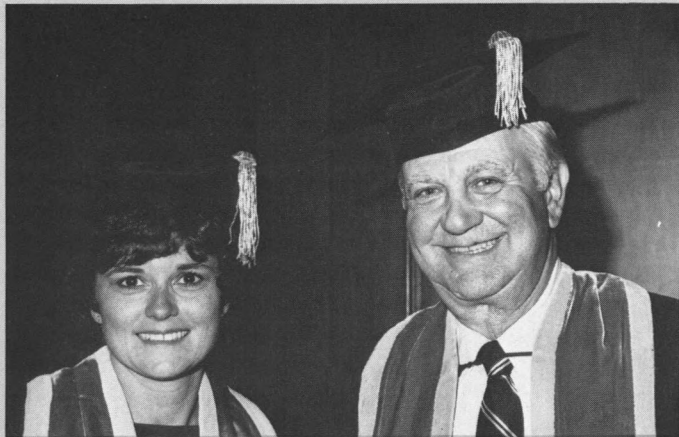
President Langsjoen, right, presents gavel to incoming President Lyndon M. Kennedy

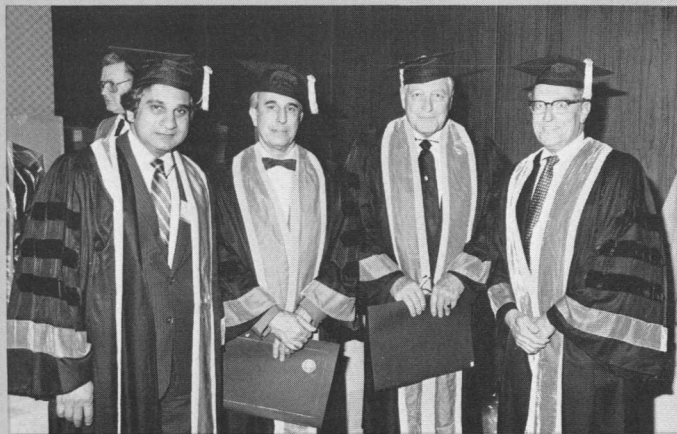
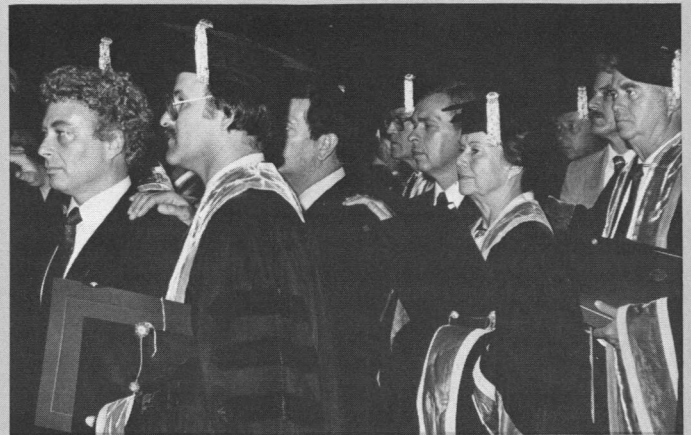


President Langsjoen places Award for Excellence Medal on Harold Hillenbrand

Photos By Dr. Edward F. Leone

FACES IN THE CROWD





CITATION PRESENTED TO BARNEY CLARK FAMILY



Dr. Fred Barnhart of Seattle, Section Chairman, represents the American College of Dentists in presenting a Resolution to the Clark family and a plaque to the University of Washington School of Dentistry honoring Dr. Barney B. Clark who was a 1953 graduate of the school. Receiving the ACD Resolution was Dr. Clark's son, Gary Clark and Dr. Clark's son-in-law Timothy Shaffer, right. A contribution of \$500. from the American College of Dentists was presented to the University of Washington Dental School for the needy student fund in Dr. Clark's name. The presentation was made in a recognition ceremony at the dental school on Dental Alumni Day, October 14, 1983.



Dr. Karl-Ake Omnell, Dean of the University of Washington School of Dentistry accepts the plaque honoring Dr. Barney Clark from the American College of Dentists to be placed on permanent display in the Dental School and which was presented by Dr. Fred Barnhart, right, Washington—British Columbia Section Chairman.



BARNEY B. CLARK

Resolution of Achievement

WHEREAS, The American College of Dentists takes note of the achievements of all its colleagues in the profession of dentistry, and,

WHEREAS, from time to time, this American College becomes aware of achievements outside the field of Dentistry that are so extraordinary that they prescind all normal measures of achievement, and,

WHEREAS, the courage and spirit displayed by Barney B. Clark captured the hearts and minds of all thinking people everywhere, and

WHEREAS, we were all honored by this kinship with a man who must now go down in history as one of the pioneers in endeavors of the human spirit, and,

WHEREAS, the courage and will to live of Doctor Clark was an inspiration to all who valued qualities of courage in the face of seemingly insurmountable odds,

LET IT BE RESOLVED, THEREFORE, that this American College of Dentists salutes Barney B. Clark for his abiding faith in the strength of the human spirit and the inspiring example he gave to his fellow dentists, to his fellow citizens, and to the world at large.

MOTION AND PASSED UNANIMOUSLY on this 8th day of April, 1983.

Odey M. Langyoin
President

Gordon R. Roubicek
Executive Director

Presented
October 14, 1983

OUR FUTURE IS FANTASTIC*

Arthur A. Dugoni, D.D.S., M.S.D.**

Ask anyone who lives back east—east of Kansas—what California conjures up and the answers are predictable. Good times. Party state. Nobody really works that hard. They just “do their thing”. In at ten, out at noon, for chilled Chardonnay and cold lobster, and back at two, or thereabouts—who punches in? Finally, out at four-thirty for tennis or jogging.

Media hype has hoodwinked Middle America and the Eastern Establishment. All those prime time fantasies and full length features written in Malibu and filmed at Marina Del Rey and Marin County, have convinced them that California is just one big spa with twenty-four million people splashing around in it.

But it seems that even we believe our own publicity and are seduced by our snake-oil salesmen. As recently as two years ago, we thought the party would never end. California was recession-proof, insisted some of the state's brightest minds. In truth, however, interest rates

*Presented before the American Association of Dental Editors—Editors' Conference, American Dental Association Meeting, Anaheim, California, September 30, 1983.

**Dr. Arthur A. Dugoni is Dean of the University of the Pacific, School of Dentistry Immediate Past President of the California Dental Association and a member of the Board of Trustees for the American Dental Association.

had started their stratospheric rise in 1979, money was drying up and the California economy started to sputter.

It was a gross error to think that California could escape either inflation or a recession, and it was certainly a mistake to think that our profession could either. We just weren't monitoring the *vital*

If the profession is to continue to grow it needs to attract the very best dental students and provide the facilities and the faculty for innovative and progressive research.

signs. The challenge to the dental profession was and is equally clear. Can we afford to do things as we have always done them? Can we maintain the status quo? Or do we need to find a better way?

As I have travelled across the country, whether it be in the dental constituent, component, or meetings of educators or deans, the often repeated theme is that these are days of crisis, retrenchment, recession, and gloom and doom. The decade of the eighties will test our mettle - and, yes, our very souls. But, I would like to take this opportunity to quote from Walter Cronkite, during one of his broadcasts:

“It is a gloomy moment in the history of our country. Not in

the lifetime of most men has there been so much grave and deep apprehension—never has the future seemed so doubtful as at this time. The domestic economic situation is in chaos. Our dollar is weak throughout the world. Prices are so high as to be utterly impossible. The political cauldron seethes and bubbles with uncertainty. Russia hangs like a cloud, dark and silent upon the horizon—it is a solemn moment. Of our troubles, no man can see the end.” Then Mr. Cronkite added, “this was published over 122 years ago in *Harpers Weekly Magazine*, October 1857 and with all that trouble and doom and gloom that sounds so familiar to the 1980's our nation survived and prospered and there is no reason why we should be of faint heart today.”

In John Naisbitt's book, *Mega-trends—Ten New Directions Transforming Our Lives*, he states: “We are living in the time of the parenthesis, the time between eras. It is as though we have bracketed off the present from both the past and the future, for we are neither here nor there. We have not quite left the either/or America of the past - centralized, industrialized and economically self contained—but we have not embraced the future, either. We have done the human thing: we are clinging to the *known*

past in fear of the unknown future—but do we have the courage to abandon our traditional industries, industries that other countries can *now* do better? Do we have the innovative ability to venture forward into the future? We are *beginning* to abandon the hierarchies that worked well in the centralized, industrial era. The computer will smash the pyramid; we created the hierarchical, pyramidal, managerial system because we needed it to keep track of people and things people did; with the computer to keep track, we can restructure our institutions horizontally—this new openness enriches us all!

Such is the time of the parenthesis, its challenges, its possibilities and its questions. Although the time between eras is uncertain, it is a great and yeasty time filled with opportunity. If we can learn to make uncertainty our friend, we can achieve much more than in stable eras. In stable eras, everything has a name, and everything knows its place, and we can leverage very little.

But in the time of the parenthesis we have extraordinary *leverage* and influence - individually, *professionally* and institutionally - if we can only get a clear sense, a clear conception, a clear vision of the road ahead.

My God, what a fantastic time to be alive!" - and so it is for dentistry.

Never in the history of our profession has there been such a real

need for dynamic, effective and innovative solutions. But, in a time of awesome challenges to our country, our profession, our educational institutions and our research capabilities it might be valuable to *reflect* on where we came from and who we are.

Let's review some of the accomplishments of the last forty years. Educational standards were first developed in 1940 but not implemented until 1942. Would you believe that the Commission on Accreditation of Dental Schools was only established in 1978? Or that the American Board of Orthodontics was not recognized until 1950 by the Council on Dental Education? Or, that the Northeast Re-

We need to assess, design and be in the avant garde of alternate delivery modes. We cannot let others do it for us.

gional Board was first developed in 1967 and now 32 states participate in regional examinations.

Before 1950 there were only minimal research dollars spent in any dental school in the United States. In the year 1950 there was \$300,000.00 expanded for dental research: this compares to over \$80 million spent in dental research in 1982. There is a disparity, however, because 10% of the schools receive 50% of the research dollars. Cur-

rently, there are over 350 Ph.D.'s on the faculty of dental schools, approximately 1 out of every 25 faculty members. There were 100 papers presented in 1950, before the American Association of Dental Research, compared to over 1400 papers presented in 1982.

We have gone from ignorance to understanding in a short 40 years. In 1982 we can look at significant curriculum changes that have resulted from outstanding research results that have occurred since 1966. In the previous era practitioners primarily influenced the curriculum along basic clinical guidelines. Today the scientific method is a vital partner in the curriculum with intellectually vibrant teachers and clinically competent clinicians. We have had thirty to forty years of a knowledge explosion and progress in such areas as: craniofacial disease, pain control, prevention and recognition of oral cancer and the marvelous advances in the behavioral sciences.

In twenty years we doubled the dental manpower. With the help of \$247 million from the federal government over 14 years, we remodeled thirteen dental schools and built 13 new dental schools. Over 60,000 dental students received federal loans and completed their education. We saw the growth of general practice residencies, TEAM Programs, dental auxiliary utilization programs and extramural sites to improve access to care for the

aged, disadvantaged, homebound, and poor and the elderly.

There have been dramatic breakthroughs in prevention. There is now agreement that dental decay is an infectious disease and that the cariogenic bacteria, as part of their energy metabolism, are capable of fermenting sugars and thereby producing organic acids, which in turn dissolve the tooth enamel. Animal experimentation continues to explore the possibility of developing a vaccine against dental caries. Dramatic scientific contributions to dental medicine during the last 30 years have increased our understanding of the cause of pathology of periodontal diseases. The realization that the active pathogenic agent is bacterial in nature and that the control of these micro-organisms can be established through mechanical and/or chemical means opened the way to treatment methodologies that clearly established that periodontal disease is preventable and controllable.

The decay preventive effect of fluorides has produced statistical data demonstrating that optimal

We need to provide our dentists with the capability to compete ethically and with quality care in the marketplace.

treatment with fluoride will reduce the prevalence of dental decay by 40% to 60%, however, the cumulative systemic and local effects of fluoride indicate a reduction close to 75%. Rampant decay is now rare in communities with water fluoridation, or in children who are the beneficiaries of systematized topical application of fluorides. Truly we have matured as a profession. Dental decay and periodontal disease, man's major dental diseases

are now clearly controllable and essentially preventable. This fact, alone, will affect dental education enormously, as well as dental practice and the needs for specialties. The declining incidence of dental decay in children, for example, will reduce the need for pediatric dentistry as we know it today.

Changes for the Future— What Are They? Will They Help Us Find a Better Way? Doom and Gloom? No Way!

Biological research on new agents to control caries and periodontal disease will continue. The possibility of a caries vaccine is real. There will be wider application and implementation of fluoridation program and the control of plaque through the use of mouth rinses, lozenges, fluoride tablets, and sealants.

Genetic engineering, as well as increased scientific knowledge will allow us to modify, and perhaps ultimately control some of the craniofacial diseases.

Improved methodologies and techniques, including psychiatric, behavioral and drug research, will continue to provide better methods of pain control. The recognition and treatment of oral cancers, coupled with early diagnosis and prevention will alter the course of these dreaded diseases. In the field of radiology, exposure to ionizing radiation will be reduced by technical improvements in x-rays and the development of alternative diagnostic techniques.

More attention will be paid to periodontal disease in the next two decades. People will become more aware of its importance and will learn more about the consequences of their daily oral hygiene practices.

This will be necessary because the average life span will be longer, the birthrate will fall, and a greater proportion of the world population will be older individuals with periodontal needs. *These increased demands will add to the busyness of the profession and the health of the public.* There will be a change in the nature of operative procedures as improvements in composite filling materials continues. Increases in the use of enamel bonding and the real possibility of direct bonding to dentin will clearly have an impact on operative dentistry. Less time will be spent in drilling and more time in restoring. Reduced time devoted to operative dentistry procedures will allow the general practitioner to devote more time to periodontal disease. There is no doubt that the general practitioner will be doing more periodontal treatment and with less referral to specialists. This will be true, as well, for endodontic treatment, minor oral surgery and the simpler orthodontic problems. Educational institutions will have to concentrate more doctoral education in these disciplines and more continuing education programs for the profession.

Research will develop a more effective means of intercepting the periodontal disease process. Treatment will concentrate on the control of the causative organisms instead of surgical intervention and consequently it will be more successful, and acceptable.

The character of a dental practice in the 1980's and the 1990's will change as a result of many internal and external stimuli. Shifts in the age structure, location and socioeconomic characteristics of the American population will influence the practice of dentistry. The *aging*

American population and its progressively slower rate of growth are important considerations. During the 1950's the population grew 18.5%, but because of a declining birthrate only 13.4% during the 1960's, and 11.4% during the 1970's. It is projected to increase only 10% in the 1980's and 7% in the 1990's. The mean age of the population changed from 28 years in 1970 to 30 years in 1980 and is projected to reach 35 years by the year 2000. Society's emphasis within the next 20 years will shift from the needs of the young to the concerns and the demands of Americans in the middle years and to the elderly. Because of improved health care and increased longevity the number of retirement age individuals doubled between 1950 and 1980. The over 65 population is projected to expand from 25 million in 1980 to 30 million in 1990, an increase of over 20%.

By 1990 virtually all of the baby boom children will be between 25 and 40 years old. This age group, traditionally the most productive, will increase from 58 million in 1980 to 78 million in 1990 and constitute over 30% of the population. The need for restorative care will shift from children to adults, as the incidence of caries will continue to decrease among children. Management of secondary caries and root caries will become increasingly important.

The thirty to forty year olds have the greatest number of decayed and filled teeth, and as this group continues to mature in the decade of the 1980's and 1990's they should constitute the largest market for replacement restorations, endodontics, periodontics and the orthodontics they avoided as teenagers.

These are exciting and monu-

mental possibilities for adult and surgical orthodontics. Will we be prepared for it? Sustained use of multiple fluorides and increased application of sealants will further reduce the current caries rate. Reduction in complex restorations should result in fewer tooth fractures. However, as people retain more teeth, the older adults will experience a greater number of tooth fractures and will need more

Our profession has gone back into the people business, being visible, being available, sharing themselves and their knowledge with the community.

replacement restorations, more endodontics, periodontics and orthodontic care.

Recent third party publications have revealed that orthodontics is the fastest growing benefit requested by employees and implemented by employers, service corporations and insurance companies. The orthodontist of the next decade will be challenged and stimulated by more innovation and change than in the entire previous history of orthodontics. It will demand an orthodontist who is more occlusally sophisticated, and who has an increasing awareness of the periodontal implications of adult therapy. Orthodontics will be heavily involved in joint clinical treatment plans with oral surgeons, fixed prosthodontists and restorative dentists. Increases in mixed dentition treatment and even earlier treatment, with the advent of functional appliances will continue to increase the busyness of orthodontists.

Dental schools will increase their participation in multi-disciplinary treatment methodologies and expand training in oral medicine, enhancing the dentist's ability to diagnose a wider range of oral disorders. There will be redirection of the educational experience with greater emphasis on the education of a broadly competent general practitioner. The profession needs to phase out, merge, or redefine selected specialty areas, and decreases in dental specialty programs need to be implemented.

As the cost of a dental education continues to rise, students will be expected to bear a higher proportion of these costs. The current cost to educate one dental student for one year is \$24,500.00. These costs are absorbed by the institution and paid for either by University or State support, tuitions, endowments, gifts, or from clinic income. The total undergraduate educational costs to the individual who earns a D.D.S. Degree in 1982 ranged from \$11,039.00 to \$98,836.00. The graduating debt level of students in 1981 was \$17,000.00 in the public schools and \$29,800.00 in private schools. Total scholarship funds awarded in 1981/82 were only \$167,424.00. Total loan funds awarded in 1981/82 was \$1,121,836.00.

Dental schools will seek alternate sources of financial support for teaching, research and scholarly activities because of the loss of federal and state support. Schools will reduce expenses by hiring more part time faculty and implementing more efficient use of faculty, facilities and staff thus reducing overhead costs. Dental school enrollments will decline and decrease in the 1980's. The future of our profession demands that constituent

and component dental societies take an active role in assisting students in the decision making process. Students need the profession's input to be able to make decisions in the following areas: professionalism, marketing and alternate delivery systems.

There needs to be a joint effort between the organized profession and the dental schools in career counselling. Bright young students need to be identified and motivated to seek dentistry as a career. It is in our interest to recommend to our best and most talented young students that dentistry is an outstanding career and offers great opportunity for service to mankind and personal happiness. The dental office is the front line of recruitment. The profession must take an active role in career counselling; by participating in career days, role modeling in dental offices and by identifying and motivating bright young high school students to seek dentistry as a career.

The recruitment of qualified students to the dental profession has to be the concern of the entire profession, not just the educational community. The current interest of high school students is being directed toward computer science, engineering and business administration. The high cost of dental education and the more immediate return on the educational investment in these fields has continued to reduce the applicant pool for dentistry. From 1975 to 1983 there has been a 54% decrease in the applicant pool. There were 15,000 applicants for dental schools in 1975 and only 7,000 in 1983. The recruitment of quality students must involve the entire profession.

It should also be noted that there will be a decrease in graduates

from dental schools in the near future as we examine first year class enrollments. In 1978/79 there were 6,301 first year students enrolled in the nation's dental schools, but in 1983 there were 5,257 first year students enrolled in dental schools. It is interesting to note that the 1983 first year class of 5,257 compares to the 5,337 students enrolled in first year classes in 1972/73.

The American Dental Association and constituent and component dental societies need to be visible at dental schools; facilitate an identity between the dental student and the organized profession and involve students in organized dentistry's activities. If the profession is to continue to grow it needs to attract the very best dental students and provide the facilities and the faculty for innovative and progressive research.

Too often the profession has looked for someone else to do the job. We need to "light the fire" under every dentist in this country that they need to support scholarship and endowment programs for dental schools. Alumni must be made to realize that they paid only a small portion of the costs of their education. Alumni support will be the keystone for survival or continued excellence of many dental schools. A dentist is a dental student for four years, but an alumnus for the rest of his or her life.

The profession must take an active role in placement programs for young graduates. Our professional colleagues must provide associateship programs so that opportunities can be developed for young practitioners to earn a living and continue to grow professionally. Our young practitioners need an alternative within the private prac-

tice system to the entrepreneurial activities that they are currently being offered.

Intensive and organized recruitment programs are essential to convince young graduates that they must be members of organized dentistry.

Compared with real growth in the economy, the average dentist's net income will experience only a modest rate of growth through the end of the century. Advertising will continue to influence the public's perception. Changes in the modes and settings of practice will require adjustment by dentists and professional dental organizations. The majority of care will continue to be provided through the traditional private practice mode, but alternative delivery modes and settings will increase. General practitioners will expand their practices to include procedures previously performed by specialists. Group practices will continue to flourish and more independent groups of two or more separate practices sharing the same facilities will develop. However, in my opinion, solo fee for service private practice has a promising future and will continue to be the *cornerstone* of the private practice system.

The future of IPA's, preferred provider and exclusive provider organizations will remain unclear as their ability to compete remains untested. Corporations will continue to experiment with providing care directly to their employees. Retail store dentistry will grow slowly, but their future will depend upon their productivity. We need to assess, design and be in the avant garde of alternate delivery modes. We cannot let others do it for us. It is not in the public interest. Preferred providers, exclusive pro-

viders, individual practice associations, and service corporations need our priority attention - we need to provide our dentists with the capability to compete ethically and with quality care in the marketplace.

Significant issues that will need our dynamic energies include freedom of choice legislation, waiver of copayment, preferred provider and exclusive provider organizations, procompetition, tax cap, or tax on health insurance premium type legislation, FTC power, experimental programs and inadequate health care funding, especially for state programs. We need to strengthen our contact alliance for initiative and referendum legislation that is not in the profession's or the public's interest. We need to maintain our legislative initiative and strategic planning to alter, modify or develop legislation on those significant issues that could destroy or reduce the quality of health care. We need to maintain our formidable and successful contacts with legislators, legislatures and legislative committees, but, we cannot rest on our laurels - we need to continue to monitor the vital signs.

Demands for independent practice by hygienists and denturists will increase. In response to decreasing net income and attempts by dentists to reduce their overhead, the traditional role of auxiliaries will expand. New specialty areas will not be recognized or developed. The behavioral and psychological aspects of dental treatment will play an increasingly important role in patient management and motivation, and there will be an increased emphasis on the training of dentists and dental students to develop strong interpersonal skills.

Oral health will be considered a

part of overall general health. Dentistry will slowly evolve toward medicine with a heavier emphasis on prevention and the use of auxiliaries.

The need to market the profession to reduce the barriers to care will increase. California has set the example for the rest of the country. California's marketing and institutional advertising programs has

The challenge for our profession in the 1980's and the 1990's will be to find a better way.

helped turn the corner of last year's busyness problem. The impact of the marketing program goes far beyond paid advertising. The true impact is on the dentist and his or her staff and their own potential for marketing their services. Our profession has gone back into the people business, being visible, being available, sharing themselves and their knowledge with the community. The television, the billboards, the public service announcements, the health fairs, the school screenings, the communication marketing seminars, all renewed and rekindled our enthusiasm for our practices and our profession. We need to continue to influence the marketplace. If I had my way, we would allocate \$1,000.00 per year, per member, for marketing. We must increase need to demand - provide access to care for the handicapped, the aged and the disadvantaged - we need to influence all aspects of the prepayment market, especially demand.

More than 5,000 years ago a Sumerian found a better way. He invented the wheel, perhaps the

world's greatest single technological achievement. Since then, millions of individuals - some celebrated and some unknown, some by design and some by accident have found a better way. Thomas Edison found a better way: the incandescent lamp. Henry Ford: the mass produced automobile. Alexander Graham Bell: the telephone. Elisha Otis: the power elevator.

The desire and the motivation to find a better way are an integral part of human nature. We Americans are especially known for our Yankee ingenuity. We are a nation constantly striving to find - and sometimes obsessed with finding a better way to do our jobs - to teach our children - to refine our goods - to sell our products - to interact with people - to maintain our health - to sell our skills and to stretch our endurance.

The challenge for our profession in the 1980's and the 1990's will be to find a better way. A better way to market our profession, a better way to reduce barriers to care, a better way to fund education, student aid, and research, a better way to increase dental health care awareness and the dental health of all of our citizens. We need to continue to reach out for high technology and quality education and research - for innovation which has been the source of our wealth and for standards and quality of care which have made our profession the envy of the rest of the world. Our profession will not restrict tomorrow's range of choices and will not dilute its capacity to solve tomorrow's problems. I am convinced we will pay the price in dollars, time and leadership and we will find a better way.

But, first we need to renew our

faith in ourselves and in our profession. Walter Cronkite appeared in San Francisco, before the Commonwealth Club, several months ago, and stated: "More than a century ago Walt Whitman wrote a poem about his country that began - I hear America singing - it has been a long while since any one claimed to hear America singing. There is a noise in the land, but it is made, mainly, by Americans blaming each other for the mess we are in. As the decibel level rises, our confidence in ourselves and in our institutions falter. But, what I want to say is - *shut up for a minute*. Listen carefully and quietly for a while; you can still make out America singing, although the sound may be a little faint. The tune is there, and the spirit and the purpose are still there. This nation, groaning economically with unemployment, in a monstrous unprecedented deficit, nevertheless, puts out an annual product worth almost three trillion dollars. The gross national product of the next greatest economy is only 55% of that. Our national image has, indeed, been tarnished in recent years, but nobody is trying to crash the gates of the third world these days. A barbed wire around the Warsaw Pact is not there to keep immigrants out. America remains the beacon of liberty, the hope and model for most of those able to exercise any choice, at all. About half of the world's people enjoy no freedom at all; no political and civil rights, nor economic freedom.

During the lifetime of most of us, we have been swept in four simultaneous eras, any one of which could be enough to reshape our world. We have been present at the birth of the nuclear age, the computer age, the space age, and the

petro-chemical age. It is a great plunging river of change, unlike anything that we have encountered before. We are living today, through a technological revolution, potentially more profound, socially, politically and economically than the industrial revolution. We have scarcely begun to identify its implications and adapt our institutions to cope. We can get this country moving with a full head of steam again, if we junk the partisan distinctions of the past, and look at our problems with a kind of principle pragmatism that this nation's founders had to employ. We have the wherewithall, all we need is the will. It has been a while since anyone has claimed to hear American singing, but they knew something that we seemed to have forgotten: to hear the music, you also have to sing along."

During the last forty years we have seen great advances in our profession. We have been "singing along" - listen to the tune! Through scientific research, we have been able to realize how to care for and essentially prevent man's major dental diseases. We have gone from ignorance to understanding in periodontal disease and dental decay and we have advanced dramatically in terms of the comprehensive care we are now able to offer each patient.

Although the 1980's will undoubtedly bring periods of retrenchment, this decade also promises the opportunity to use our knowledge, experience, and understanding in new and innovative ways, but we need to "sing along". Perhaps one of the greatest things that will happen to our profession will be the reduction of the restorative needs of our patients, by fluoridation and pre-

ventive dentistry techniques. Dentistry's future will be in periodontics, functional occlusion, oral pathology, chronic pain modalities, temporomandibular joint dysfunction, implantology, oral medicine, genetic engineering, behavioral sciences, care for the handicapped, care for the aged and disadvantaged, and preventive, functional and adult orthodontics.

When these eventualities fully hit the profession, the horizons for service to mankind will be opened remarkably, and the opportunities for personal satisfaction and a sense of accomplishment will truly reflect what it means to be part of a learned profession - a doctor.

This is an exciting time for our profession - it is a time of change and challenges. We should welcome change and savor the challenges, because they open up opportunities to shape the future of a great profession. Dentistry's future is brighter than ever, and in another 40 years we will look back and reflect that the decades of the 1980's and 1990's were unsurpassed in the development of the dental professor. Δ

References

1. *In Search of Excellence*; Thomas J. Peters, Robert H. Waterman, Jr.; Harper and Row Publishers, 1982.
2. *Strategic Plan: Report of the American Dental Association's Special Committee on the Future of Dentistry*; July 1983
3. *Megatrends: Ten New Directions Transforming Our Lives*; John Naisbitt; Warner Books, 1982
4. ADDRESS, (Commonwealth Club); Walter Cronkite, 1983

Reprint requests to:
Dr. Arthur A. Dugoni, Dean
School of Dentistry
University of the Pacific
2155 Webster Street
San Francisco, CA 94115

HEALTH CARE: CHANGES, CHALLENGES

Richard J. Reynolds, D.D.S.*

Traditionally when an individual goes through the educational system and acquires the training, credentials, and certification requisite to the practice of one of the healing professions, he avows to society at large not only a technical and intellectual competence based on a highly specialized education but moreover, he proclaims himself to have moral, ethical, and social accountability. In addition, as the custodian of these unique skills, he is expected to utilize his expertise in the service of the public need and benefit prior to any consideration of self-interest on his part.

We begin with the lexical distinction to be drawn between "profession" and "trade". According to the Oxford English Dictionary, the word trade derived from the Germanic and Anglo-Saxon noun roots meaning "footstep", "course", or "track" and from the verb meaning to "tread". This originally referred to the track or trail of a man or beast—"footprints", and deriva-

tively a regular or habitual course of action in the practice of some occupation, business, or profession habitually carried on as a means of livelihood or gain. Formerly, "trade" was used very widely to include professions, now it is usually applied to a mercantile occupation or to a skilled handicraft as distinct from a learned profession.

"Profession", on the other hand is a 12th Century Middle English adaptation from the Latin and refers to a public declaration—a business or profession that one publicly avows—a vocation in which a professed knowledge of some department of learning or science is used in its application to the affairs of others.

Formerly and in the wider sense: a profession was any calling or occupation by which a person habitually earns his living. Now it is more strictly applied to an occupation considered to be intellectually and socially superior to a trade. The practice of a learned profession is based on scientific inquiry and knowledge acquired in a university setting rather than mere know-

how and handicraft.

Knowledge and scholarly inquiry remain crucial to the professions. Especially is this true in periods of great scientific progress. The pursuit and acquisition of knowledge does not automatically guarantee that the custodian of this specialized knowledge is a true professional. Professional character is grounded in other values, not the least of which has to do with our moral nature. The professional commitment has to do not only with the mind and hand but with the heart; not only with aptitude and competence but with character.

The composite of a professional should include, at least, the following virtues: persistence, integrity, compassion, veracity, fidelity, public spiritedness, humility, and dignity in appearance, speech, and demeanor.

It is indeed a sad commentary, but at the same time it is only realistic to admit that there is a general public perception with an undeniable and widespread resentment that health care costs are entirely too high and that doctors

*Richard J. Reynolds, DDS Past President, American College of Dentists.

as a class make too much money. It goes without saying that every practitioner of any trade, craft, or profession has a right to expect a fair return on his efforts. However, money making or what is often the case, an avaricious love of gain can distort the practice and corrupt the practitioner.

Sir Thomas Browne, a 17th century physician and philosopher, stated that no person should approach the temple of science with the soul of a money-changer.

The basic doctrine of professional ethics is a single statement:

"We profess to maintain superior knowledge, skill, and judgment and will apply full measure of these in service to the public benefit prior to any self-interest on our part."

This statement contains no power of restraint. Adherence is voluntary, therefore it cannot be challenged for being coercive.

Historically, the common bond of all professions has been the code of ethics, for it is through voluntary adherence to such standards of

conduct that members of a profession manifest their moral and ethical accountability. Professions, like religions, have custody over the credentials and the manner in which persons are admitted and maintain their membership. The obligation to abide by common beliefs, principles, and ethics characterizes professions as well as religions; because these ideals and objectives serve the common good, both are entitled to the prerogative of self-governance without interference. The same Sir Thomas Browne held that common opinion, and tradition are entitled to a legitimate presumption in their favor. If a thing has been long believed and practiced, we ought not to discard it unless we obtain clear evidence that it is mistaken or outmoded.

Basically, I am by nature an optimistic person and I deplore the prophets of doom and gloom. But, there are many disturbing signs and indications that cannot be ignored.

Currently, the healing professions are facing ethical and moral dilemmas and concerns about the very

nature of the doctor-patient relationship. In addition, doubts have been expressed about the objectives and the compass of our professional ministrations and the very survival of our traditional health care delivery system.

There are various attempts to downgrade the professions through widespread malpractice litigation, government regulation, and efforts by consumer groups to cut the professions down to size and to redefine them as trades. Those of us in the healing professions find these trends disturbing, although it would be totally absurd to deny the validity of the charge that practitioners have brought some of the trouble on themselves.

In the 1970's, great emphasis was placed on "Health Care Delivery" and an unprecedented effort was made to take advantage of the scientific progress of the preceding years. Improvement of the public access to health care was provided through revolutionary social legislation involving Medicare, Medicaid, and expanded third party health insurance coverage. As a

result of that experience, we now find ourselves in an era of "economic concern". Our economic resources are being subjected to the strain of an ever increasing cost of health care. A case in point is the record of spending for Medicare, which started at \$3.0 billion in 1967, rising in 1983 to \$38.2 billion with \$50.4 billion the estimated cost for 1984. There is no doubt that the cost of health care will be the transcendent issue for the balance of the 1980's with far reaching and sinister implications.

The rhetoric of the assorted critics of our traditional system is harnessed to the concept of cost containment through either a more competitive market or more intrusive regulation with the emphasis on low cost rather than high quality health care.

So we face the decade of economic concern with considerable trepidation. Our world is indeed changing and we must face the alterations and adjustments which are inevitably occurring with cautious optimism and a certain degree of equanimity. I am reminded of

the story from Greek mythology of Pandora's Box: To be revenged on Prometheus for stealing fire from heaven to give to man, the gods sent a beautiful woman, Pandora, with a closed box, to his brother Epimetheus. Epimetheus opened the box, thereby releasing diseases, pains, and troubles upon mankind but managed to close the lid in time to retain hope, which was at the bottom.

No one can determine at this point the long term consequences of the changes which are looming on the horizon and which will have tremendous impact on career selection and enrollment, post-graduate training, research and clinical practice. Our chief hope lies in a recognition by our lawmakers that some of the changes being proposed are not in the public interest. In the final analysis, the propriety of the changes will be determined by their effect on the progress of our professions and the health of the people of this nation.

Lest these remarks should be construed as being too negative, let me say on the positive side that we

need have no concerns about the scientific and technological progress of the healing professions. The impressive research and development of sophisticated and ultra-modern machines and equipment, drugs, and materials together with innovative techniques have made it possible not only to extend life, but to enhance the quality of life. This is a time for resolve not despair. We can be very proud that the excellence of our professional record is not in question.

We must, and I am confident that we will, achieve a satisfactory long term solution to the unsettling socio-economic problems that threaten to divert us from our mission and purpose and the continuation of our progress. It is important that we portray ourselves as competent, caring, and compassionate and in the words of Confucius, "Inclined to the task, not bent upon pay". Δ

Reprint requests to:
Richard J. Reynolds, D.D.S.
5350 Poplar Avenue
Memphis, Tennessee 38117

UNDERSTANDING COMMUNICATION NEEDS OF OLDER DENTAL PATIENTS

Enid J. Portnoy*

Communication Needs of the Elderly

The relative size of the older population since 1900 in this country has almost tripled (Woodruff and Birren, 1983). Conservative estimates for the future include at least a doubling of the elderly population that exists today. With more people of advanced age seeking medical assistance, their concerns are significant for every health professional.

In terms of social interaction, it has long been suggested that the quality of a person's life is directly linked to the quality of the individual's communication (Stewart, 1982). The need to interact is recognized as fundamental for the human condition at every life stage. "It is through dialogue that man accomplishes the miracle of personhood and communication" (Howe, 1963, p. 7). As we age, communication needs and abilities change. An individual's adjustment to such changes strongly influences the success of messages sent and received.

Communication opportunities for the elderly often are limited in number due to their limited mobility, societal age discrimination and an isolation which can be the consequence of sensory, financial, or environmental constraints. In order to compensate for the loss of varied informal communication contexts, more formalized activities

and events, such as a dental visit often assume added weight and significance.

Older Dental Patients

The older patient entering the dental office may be experiencing some degree of sensory change. The health care environment may or may not be familiar to the person and the degree of environmental comfort perceived varies, depending upon the manner of adjustment to impaired visual or auditory sensitivity. Each elderly patient's behavior is individualistic; one patient may regard the dental experience with suspicion and hesitation; another may be overly talkative. Sensory changes brought on by the aging process can create barriers which effect communication. If patients only attend to or receive only part of a message during conversation, they may experience frustration, embarrassment, or rejection, finding it difficult to interpret the information and/or responses of the dentist. Research suggests that if the message appears ambiguous, the elderly may withdraw from social interactions (Bettinghaus and Bettinghaus, 1976; Feiffer, 1970; Miller, 1968). The withdrawal may take the form of silence, or generally aggressive or negative verbal or nonverbal outbursts of feelings.

The addition of dentures for a patient often signals a change in communication behavior. Some denture wearers are initially quite reluctant to engage in conversation unless forced to do so. As a health

professional, the dentist can invite the patient to express fears and embarrassments which adjustment to dentures might provoke. By acknowledging the patient's new physical image and the vocal and tactile sensitivity changes present, a dentist can encourage a more honest sharing of communication concerns of the patient.

A successful interaction between older patients and the dentist depends upon the patient's perceptions of a mutually satisfying relationship being developed. Such a relationship enables the older patient to maintain a sense of confidence in her/his own identity, and to experience personal control over the health environment.

Time Constraints

Human relationships need sufficient time to develop. One of the greatest problems facing both patients and the dental professional is the recognition of the patient's uniqueness as a person, rather than as a collection of medical symptoms. Although time constraints are rigorous for the dentist, in contrast, most older patients are relatively unfettered by fixed schedules or activities. The amount of time dentists spend with patients is itself a nonverbal communication message, which an older person is likely to perceive as an expression of interest and caring.

Despite the strongest intentions to handle all patients alike, research from *Medical World News* (1981), suggests that members of the med-

*Enid J. Portnoy, Assistant Professor, Speech Communication, West Virginia University.

ical profession generally spend less time with persons over sixty-five than with younger persons. If appointment times are compressed, older patients may feel frustrated at having to fit into the professional's pressured schedule. The informational content of conversations with the health professional is not considered by patients to be as significant as the personal communication which occurs within the relationship (Lane, 1982). The personal aspect also appears significant as a means of gaining patient compliance within the health framework (Lane, 1982). The manner in which time is handled interpersonally contributes greatly to a climate of trust, important for both the patient and the dentist. Some researchers suggest that when patients feel depersonalized and receive what they feel is insufficient interaction time with the health professional, more dissatisfaction results within the patient-doctor relationship (Lane, 1982).

"A good relationship between doctor and patient contributes to the quality of the life of the patient even as it contributes to the security of the physician" (Cousins, 1983, p. 4). It is not surprising then, that the expectations of senior citizens in approaching the dental office are often higher than the dentist realizes. For many older patients a dental appointment presents a welcome opportunity to practice their communication skills (interaction with others). Bert Smith suggests in *Aging in America*, the need for relatedness may turn out to be the strongest force which stimulates us

(Smith, 1973).

When conversing with the elderly patient, the dentist should anticipate the need for a larger response period within the normal speak-listen rhythm of conversation. This permits the older person to delve deeply into their storehouse of information and experiences before generating a vocal response. In communication, the term "response latency" is used to indicate the time adjustment between one person's utterance and another's response. The elderly need a longer response latency than younger individuals and often display a slower rate when they do respond. The extra time taken is necessary for the generation and processing of information. In addition, an older person with a hearing loss may be used to waiting for the feedback sounds of his/her own voice. The dentist's awareness and subsequent decrease of tempo when speaking makes message decoding an easier process for older patients.

Coupled with a slower tempo, the dentist will want to engage in more direct eye contact, and position himself/herself in such a way that patients with sight or hearing decrements can use the dentist's face as the source of important feedback cues.

As relaxing as the environment appears to the professional, the patient often feels unable to pose questions which would alleviate a certain amount of emotional or physical tension being experienced. Older patients display their conservative nature, often being reluctant to reveal any ambiguity or

discomfort they feel. Additionally, if pressured by time, they are less likely to echo their hesitations or express specific communication needs. The presence of speech errors and increasing unfilled pauses may nonverbally suggest the presence of anxiety or stress experienced by the patient (Knapp, 1978).

According to research by Mehrabian and Ferris (1967), the core of a message shared with another is largely communicated through nonverbal rather than verbal means. For older patients, nonverbal cues are often more heavily relied upon to help relate them to others and to their environment (Knapp, 1978). Robert Butler, former director of the National Institute on Aging wrote: "One must be prepared for the older patient's greater need to be physically touched" (Butler, 1979, p. 535). That touch is a powerful communication channel cannot be denied, especially when it is used to establish feelings of immediacy between individuals. Immediacy can be defined as the subjective impression of warmth and responsiveness which one person displays verbally and nonverbally toward another. Touch and other nonverbal cues are commonly relied upon by the older person for the development of immediacy perceptions in their relationships with others.

Common Visual Impairments of Older Patients

Sometime after the age of forty, individuals begin to develop a condition known as far-sightedness. Objects close-at-hand appear less

defined. As the condition persists, more of the visual field becomes obscured, resulting from an increase in the size of the lens. Sixty percent of females over 65 and forty percent of males over 65 experience this condition which is called presbyopia (Sensory Deprivation Simulation, 1973).

The development of cataracts in the elderly creates a blurred, fuzzy focus for objects in general. Depth perception may also be affected. How does this affect interactions with older persons?

During regular dental procedures close proximity between dentist and patient is normative behavior. However, older persons with sight problems such as those described above, may become frustrated and uncomfortable at having their visual and physical space "invaded" by the dentist or hygienist. A partial reason why many elderly patients avoid seeking dental help may be their reluctance to submit a part of their body for close examination. Although body messages are being attended to constantly as we age, we seem to grow more protective in old age of our body space as representative of our personal and unique domain. The feeling of body-privacy invasion in the health care environment may be perceived as another way in which the elderly are forced to surrender control of their own person. According to the Communication Equilibrium Theory (Argyle and Dean, 1965), closer distances between individuals provide greater intimacy potential. This theory may enhance

other interpersonal contexts, but for older dental patients suffering from vision impairments, close distancing may produce uncomfortable personal reactions. Continual restless limb and postural movements may be a patient's nonverbal attempts to readjust distancing to restore personal equilibrium (Knapp, 1978). Rather than encouraging communication, close proximity may hinder communication when the patient is confronted by visual images which act as a barrier to their physical and psychological comfort.

Additionally, communication research suggests that invasion of personal space tends to intensify our interactions with others (Schiffenbauer and Schiavo, 1976). "Rewarding" invaders are perceived more positively than noninvaders, and "punishing" invaders are perceived more negatively than noninvaders. Depending upon the trust developed in the dentist-patient relationship, the dentist may be perceived as either potentially rewarding or punishing.

Auditory Impairments of Older Patients

It is fairly simple to detect vision losses and their affects in the elderly patient, but much more difficult, within the brief span of office visit time, for a dentist to become aware of "invisible" hearing problems. Approximately fifty percent of the United States population affected by hearing loss are those age sixty-five and older (Shaddon, Rainford, and Shaddon, 1983). Although hear-

ing loss occurs unevenly during the aging process, it is not unusual for psychological stresses to occur at any time, in conjunction with such sensory changes. The diminished ability to discriminate and receive high frequencies is called presbycusis (Shaddon, et al., 1983). This condition is associated with aging, and increases in persons past age forty-five (Shaddon, et al., 1983). Individuals with high pitch voices become uncomfortable interaction partners for the elderly. Along with high frequency losses, elderly patients may lose the ability to discriminate between similar sounds and may appear confused in responding to others. Feelings of irritability and frustration are common among the hearing impaired due to their inability to grasp the entire meaning communicated by others. Squinting while listening, increased dependence on the dentist's lip movements, frequent interruptions of conversation, and constant requests for additional information or clarification—all are cues which call attention to problems a patient may have with hearing (Butler and Lewis, 1973, p. 33). If the older patient with a hearing loss experiences an overload of verbal information from the dentist, a withdrawal from the communication situation may occur.

In the dental office, background sounds may be an impossible barrier for a person with hearing loss to overcome. A steady hum provided by others talking, instruments coming in contact with one another, or canned music being played can

disorient some hearing-impaired patients. Older persons suffering from hearing loss may even begin to imagine that others conversing around them are discussing them in a negative manner. Such individuals can become argumentative or else extremely withdrawn. With either personality type, communication proceeds slowly, if at all (Lane, 1982).

The dentist needs to be sensitive to certain nonverbal behaviors of patients which may indicate hearing difficulties: frozen or neutral facial expressions during conversation, dazed eye appearance, restless limbs or postural movements during conversations, slurred pronunciation, and inappropriate verbal responses (Lane, 1982). Additionally, older persons with hearing loss often refuse to admit they have a problem and will remain trapped by their refusal to adjust to their own sensory loss. Information conveyed to the older patient with a hearing loss should be direct, concise, and presented slowly with ample time provided for mutual reliance on verbal and nonverbal feedback.

Since many elderly patients experience vision and/or hearing impairments, it is suggested that important information be transmitted to them through at least two communication channels. If written instructions or appointment cards are given older patients, the information should be printed clearly in bold lettering and should also be verbally reinforced. To further assure compliance, a reiteration of information should be shared with

anyone accompanying the patient. Echoing a person's responses provides a clear opportunity for the dentist to confirm what is assumed to be the sender's intent. A lack of memory ability in some elderly patients to recall verbal instructions over time is another compelling argument for using more than one communication channel to transmit information.

The first step in learning how to satisfy the needs of older dental patients is to be aware of them. Each elderly person is a unique personality with different communication needs. Vision or hearing impairments may contribute to feelings of communication isolation for the older person. A strong interpersonal connection between older patients and the dental staff can help to expand their communication networks and provide the opportunities elderly patients need for meaningful professional communication relationships. Δ

References

- Argyle, M. and Dean, J. "Eye Contact, Distance, and Affiliation", *Sociometry*, 1965, 28, 289-304.
- Bettinghaus, C. O. and Bettinghaus, E. P. Communication Considerations in the Health Care of the Aging. In H. Oyer and E. Oyer, Eds., *Aging and Communication*. Baltimore: University Park Press, 1976.
- Bridges, Not Walls*. Stewart, John (Ed.) MA: Addison-Wesley Publishing Co., 1982.
- Butler, Robert "Psychiatry." In *Clinical Geriatrics*, Rossman, I. (Ed.), 2nd Edition. Philadelphia: J. B. Lippincott Co., 1979.
- Butler, Robert and Lewis, Myrna. *Aging and Mental Health: Positive Psychosocial Approaches*. St. Louis: C. V. Mosby Co., 1973.
- Cousins, Norman. "The Public has Entered Medical School", In *Creative Living: The Magazine of Life*, Spring, 1983, 3-4.
- Feiffer, M. A Developmental Analysis of Interpersonal Behavior. *Psychological Review*, 77, 1970, 197-214.
- Howe, Reuel. *The Miracle of Dialogue*. Seabury Press, Inc., 1963. Cited in *Bridges Not Walls*, J. Stewart (Ed.), 1982.
- Knapp, Mark. *Nonverbal Communication in Human Interaction*. New York: Holt, Rinehart and Winston, 1978.
- Lane, Shelley. "Communication and Patient Compliance". In *Straight Talk: Explorations in Provider and Patient Interaction*, L. Pettegrew, P. Arnston, D. Bush and K. Zopp, (Eds.), Humana Inc., ICA, 1982, 59-69.
- Medical World News*, 1981.
- Mehrabian, A. *Silent Messages*. Belmont, CA: Wadsworth Publishers, 1971.
- Mehrabian, A. and Ferris, S. R. "Inference of Attitudes from Nonverbal Communication in Two Channels." *Journal of Consulting Psychology*, 1967, 31, 248-52.
- Miller, S. J. The Social Dilemma of the Aging Leisure Participant. In B. Neugarten, Ed., *Middle Age and Aging*. Chicago: University of Chicago Press, 1968.
- Schiffenbauer, A. and Schiavo, R. S. "Physical Distance and Attraction: An Intensification Effect." *Journal of Experimental Social Psychology*, 1976, 12, 274-82.
- "Sensory Deprivation Simulation", Ross, Gary, Developer. University of Nebraska Gerontology Audio-Visual project, 1973.
- Shaddon, B., Rainford, C. and Shaddon, H. *Coping with Communication Disorders of Aging*. Oregon: C. C. Publications, Inc., 1983.
- Smith, Bert K. *Aging in America*. Boston: Beacon Press, 1973.
- Tamir, Lois. *Communication and the Aging Process*. NY: Pergamon Press, Inc., 1979.
- Woodruff, Diana and Birren, James. *Aging: Scientific Perspectives and Social Issues*, 2nd Edition, California: Brooks/Cole Publishing Co., 1983.

Reprint requests to:
Enid J. Portnoy
673 Clearview Avenue
Morgantown, W.Va. 26505

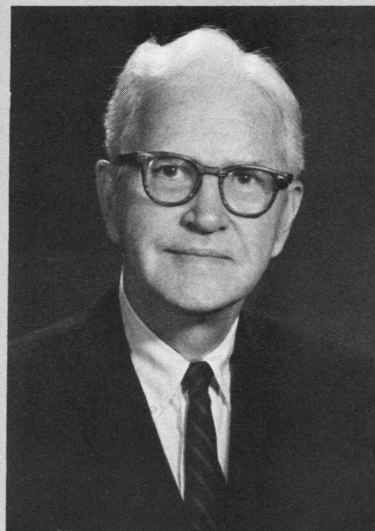
A TREASURY OF DENTISTRY

Gardner P. H. Foley

John Hunter

John Hunter (1728–1793), the English physiologist and professor of surgery, was one of the many valuable contributors to dental science who were primarily workers in other areas of research. In 1771 Hunter published his *Natural History of the Teeth*, honored as a milestone in the history of dentistry. In this work Hunter explained the structure of the teeth and their uses, formation, growth, and diseases. In 1778 his *Practical Treatise on the Diseases of the Teeth* was published. Hunter sought to establish a scientific nomenclature for the teeth. He discoursed comprehensively and very accurately on the physiology of the masticatory apparatus. A strong advocate of replantation and transplantation, he did extensive animal experimentation with these processes. He was the first to state the necessity of entire removal of the diseased pulp as an indispensable preliminary of the restorative procedure.

There is an interesting and salutary anecdote concerning John Hunter and his beautiful and highly educated daughter. When Mrs. Charlewood was an elderly woman, no one who talked to her could fail to observe the perfect regularity and the dazzling whiteness of her teeth. She gave this explanation for the remarkable preservation of her teeth: "During my girlhood my



Gardner P. H. Foley

Though not a dentist, the author is a Professor Emeritus of Dental Literature and Dental History who taught over 40 years at the Baltimore College of Dental Surgery.

He is a Fellow of the American College of Dentists and was a founder of the American Academy of Dental History. He is an honorary member of many dental organizations.

An experienced dental editor of many years, he is more recently recognized for his "Foley's Footnotes" in the ADA Journal.

father, John Hunter, was constantly examining them, filing them, etc.—I might say that his fingers were never out of my mouth. I thought this a great annoyance at the time, but I am now reaping the benefit of it."

James B. Hodgkin

In 1891, James B. Hodgkin wrote a tribute to the dental profession that he exultantly titled "He Can Do Anything." Especially worth considering is the fact that the writer of the eulogy was a dentist, a graduate of the Baltimore College of Dental Surgery in 1869. Also the reader will be impressed by Hodgkin's own versatility as a dentist, a dental educator, and a contributor not only to the professional literature but also to the lay literature.

Before he entered dental school, Hodgkin had served throughout the Civil War in Company E, 3rd Regiment of Virginia Infantry, Rickett's division. He was a strong member of the BCDS faculty (1872–1888), and later taught in the dental departments of National University and Howard University, both in Washington, D.C. He was the author of the first "quiz questions" book for dental students, *A Series of Questions Pertaining to the Course of Lectures on Dental Metallurgy* (1881). He invented a method of bridging a space left by the loss of an incisor and a method of crowning molars and premolars. Besides his many contributions to dental journals, Dr. Hodgkin was a frequent contributor to magazines such as the *Atlantic Monthly*. Several of his stories were published in *Southland Stories* (1903).

HE CAN DO ANYTHING

All of us remember that old man so quaintly described by Oliver Wendell Holmes, who had a crook in his back and a melancholy crack in his laugh, and whose nose, the poet tells us rested on his chin like a staff. He is a rare member of society now. His porcelain teeth fill up the hollow cheeks, and separate the aforesaid nose and chin. If it were in the province of the dentist, I think he would try his hand at straightening his spine, for your modern dentist is an adventuresome fellow, and what is more, he quite often succeeds in his adventures. It is a pastime for him to set a porcelain crown on that broken off tooth of yours, and he will build you up a whole tooth out of gold, or patch up the old one so that it is as good as new, if not better. He will plant you a tooth from somebody else's jaw in your toothless gum, or take out your diseased one, cut off the bad part, and put the rest back. If you have lost your nasal organ, even, he will make you a new nose out of rubber or celluloid, which, if it can't be used for taking snuff, can at least be utilized for holding your glasses on. Was it not a dentist who discovered anesthesia, that boon to humanity beside which all other gifts of the Esculapian craft are but a hollow mockery, bringing sweet dreams and be-

Anthony A. Drexel Biddle

Anthony J. Drexel Biddle, of Philadelphia, was a highly colorful and most individualistic person. His daughter Cordelia wrote a book about him, *My Philadelphia Father* (1955); the pocketbook edition was titled *The Happiest Millionaire* (1963). Kyle Crichton wrote a successful play, using the latter title, which I saw in Dennis, Massachusetts, with Victor Jory playing Biddle. There was also a Walt Disney production with Fred Murray and Greer Garson in the leading Biddle roles.

Though Biddle was a member of Philadelphia's high society circles, he became widely known for his friendship with professional fighters whom he engaged to box with him in his private ring. From Biddle's rigid program to make his son Livingston a model of virility by hiring prizefighters to teach the boy the so-called "manly art of self-defense" there evolved this superb anecdote.

Liv was having his teeth straightened, and father was paying a stiff price for the usual braces. Just as regularly, father was throwing Liv into the ring with a neighborhood rival and the braces were being knocked off. Liv would turn up at the dentist's office with a cut mouth and the braces twisted like a pretzel. The dentist would spend a week making new braces, install them with care, and send father a whopping bill. Father would bellow at the expense, soon forget about it, and Liv would be back in the ring again for a new treatment. It was the dentist who finally cracked. After the fourth disaster to the braces, he wrote father a furious letter: "If you want your son to go through life looking like an orangutan, all very well, but it's not going to be said that I assisted in the outrage. Either he stops fighting, or I drop the case."

artific visions to the tortured body? Was it not a dentist who made the first little glass mirror your throat-doctor uses, and by virtue of which all of the useful discoveries of throat-ology were made to be known? Did not the dentist invent that contrivance by virtue of which when a poor

fellow had lost a part of his throat organs, and his speech degenerated into an unintelligible snuffle, his tone is again made clear, resonant and sonorous? Is it not to dentistry that we owe that brilliant conception of the electrical light for the mouth, aiding in the search for hidden diseases?

MAINTAINING REALISTIC STANDARDS FOR ADMISSION TO SCHOOLS OF DENTISTRY— SHOULD WE BE CONCERNED?

H. Barry Waldman*
Sharon von Bock**

There can be no doubt that since the mid 1970s, there has been a significant decrease in the number of applicants to schools of dentistry. Repeated discussion and analyses have filled the pages of the profession's journals. The "... question of maintaining class size and the ability to fill first year classes with qualified applicants"² has been the subject of any number of conference reports and increasingly has occupied the time of dental educators. For example, the proposed merging of the University of Kentucky and the University of Louisville dental schools, in part, would be the result of a decline in the numbers of applicants at both institutions.³ The idea even has been raised of "... lowering standards but admitting students of high moral character."² (The questioning of defining desired moral characteristics and how they are to be ascertained during an interview, similarly has been considered.)

Disquieting as this situation may be, it is essential that we consider these developments in proper perspective. For example, in a recent presentation, an effort was made to demonstrate that, in terms of the number and calibre of dental school applicants and students, dental

schools are returning to an equilibrium which existed prior to the establishment of massive federal

In 1973 there were 14,876 applicants to schools of dentistry. In 1984 the projections are for only 6,450 applicants.^{1,2}

incentive programs.⁴ In an update of the earlier data, for the 1982-83 academic year, public dental school entering class overall grade point averages, science grade point averages, dental admission test academic and perceptual ability average scores, remained essentially at the level for the entering classes in the early and mid 1970s. Some decreases, as compared to this earlier period, were noted for private dental schools.⁵⁻⁸

Perceptions

Yet even more important than actual numerical presentations is the general interpretation of these data. Could it be that in the last few years we have become accustomed to the luxury of an overwhelming number of applicants to each school? For example, during the mid 1970s, the School of Dental Medicine at Stony Brook had over 60 applicants per entering class seat.

An editorial in the Journal of

Dental Education written in the mid 1970s,⁹ calling for a greater diversity in the background and interests of accepted applicants, raised a series of thoughts which may seem even more appropriate in this period of decreasing number of applicants:

1. The effort for ever increasing credentials could reflect the subconscious need to prove that dentistry is not a second class profession; that because our applicants must overcome as many difficult academic hurdles as medical students, our profession is on a par with medicine.

2. Some dentists may be too educated for a lifelong career in the traditional private solo practitioner arrangement. In an only human effort to improve, we have effected an "ersatz-Peter Principle," i.e. instead of promoting to incompetence, we have educated to dissatisfaction.

3. In an effort to improve and advance, we may have ascribed unnecessary requirements to many of the repetitive tasks provided by dentists.

The thrust of the editorial was not a call for mediocrity; rather it was an effort to strengthen the profession by understanding the admission process to dental school and the realities of the future practice of dentistry.

In the 1970s "buyer's market"; i.e. when admissions committees enjoyed (a more appropriate term may well be "labored" with) in-

*H. Barry Waldman, DDS, MPH, PhD, Professor and Chairman, Department of Dental Health, School of Dental Medicine, State University of New York at Stony Brook, Stony Brook, New York 11794.

**Sharon von Bock, Assistant Dean for Administration

creasing numbers of applicants, did dental schools unnecessarily raise their expectations for successful applicants? Have we habituated ourselves, preprofessional college advisors and cadres of young men and women to the need for unrealistic requirements? At a time of decreasing numbers of candidates (whether because of the economics of dental education, improvements in engineering career potential, etc.) must any reassessment and re-evaluation be considered destructive to the future of the profession and the public we serve?

A further and equally complex perception pertains to the American Dental Association's national recruitment program.² This program would be an effort to stimulate practitioner support for the identification and encouragement of young men and women to seek a career in dentistry. However, such an endeavor would need to deal with the underlying attitude that the decrease in the number of dental school entering places and applicants may be one of the solutions to the increasing competition among practitioners. Decreasing practice busyness continues to be reported by many practitioners.¹⁰

Traditionally, the family practitioner always has served as the dental profession's most successful recruiter. At a time when each "encouraged" youngster is considered to be a potential competitor, it would seem logical to anticipate limited support for such a program.

Some Directions

To even suggest that dental school admission committees consider applicants with more "realistic" academic performances is to court the scorn of both educators and practitioners. Yet, over a 30 year period, (even during those times when because of fewer applicants, individuals were accepted with lesser academic performance records) a review of the percent of failures on state and regional licensing board examinations indicates no particular relation between the rate of failure and the number of applicants or applicants per entering seat.³ In addition, even in the mid and late 1970s, numbers of public schools of dentistry accepted in-state applicants with varying academic performance records from a wide spectrum of community and four year colleges. Is one to assume that graduates from these schools are any less qualified as practitioners?

To consider prepared, well motivated young men and women of "high moral character" is not to lessen the future of dentistry. The strength of the profession's future lies in its diversity and ability to adapt to the changing environment for the delivery of services, not in some arbitrary grade point average. The adversity that now confronts dentistry gives us the opportunity for re-evaluation and improvement for the future. Δ

References

1. Dental Education, Trend Analysis. Annual Report on Dental Education. 1974-75, Supplement 10. Chicago, American Dental Association, 1975.
2. Executive Summary of the meeting of dental school admission officers, financial aid administrators and student affairs deans. Georgetown University School of Dentistry, October 31 and November 1, 1983.
3. You and the news. Dental Management, 23:7-8, November 1983.
4. Waldman, H.B. Schools are returning to normal. Journal American College of Dentists, 50:17-23, Spring 1983.
5. Dental School Admission Information 1975/76 through 1981/82. Annual Report on Dental Education, 1975/76 through 1981/82, Supplement 7. Chicago, American Dental Association, undated.
6. Analysis of applicants to dental school and first year enrollment, 1973. Annual report on Dental Education, 1973/74, Supplement 8, Chicago, American Dental Association, undated.
7. Analysis of applicants to dental school and first year enrollment, 1974. Annual Report on Dental Education, 1974/75, Supplement 7, Chicago, American Dental Association, undated.
8. Applicant Analysis, 1982 Entering Class. Washington, D.C., American Association of Dental Schools, undated.
9. Waldman, H.B. Eliminating some unexpected effects of the dental school admission process. Journal Dental Education, 42:513-515, September 1978.
10. Scholle, R.H. Just the fact, please. Editorial. Journal American Dental Association, 107:536, September 1983.

Reprint requests to
H. Barry Waldman, D.D.S.
School of Dental Medicine
State University of New York
Stony Brook, N.Y. 11794

IN-COURSE REMEDIAL SYSTEM

Wallace S. Edwards
C. Douglas Smith
Thomas A. Garman
P. Kenneth Morse
Jack D. Zwemer

The evaluative measures employed in the dental *admission* process are designed to minimize future student attrition and to maximize student retention to the completion of formal professional education. These measures have been reasonably successful in identifying probable success in basic science and other didactic courses. Pre-admission tests, however, have not been reliable predictors of psychomotor skills and subsequent dental laboratory and clinical performance. As a result dental schools have been faced with the frustration and perplexity of coping with students whose psychomotor skills do not enable them to meet technical performance standards within the constraints of assigned schedules.

In the past, remediation of these problems has taken many forms and occurred at various times. Most often it has followed the complete administration of a course of instruction and the recording of an unsatisfactory grade. This is particularly true in the lock-step progression of a traditional dental

Wallace S. Edwards, D.D.S., M.A., Associate Professor, Department of Restorative Dentistry.

C. Douglas Smith, D.D.S., Associate Professor, Department of Restorative Dentistry.

Thomas A. Garman, D.D.S., M.S., Professor, Department of Restorative Dentistry.

P. Kenneth Morse, Ph.D., Professor, Educational Research and Development.

Jack D. Zwemer, D.D.S., Ph.D., Professor, Department of Community Dentistry.

School of Dentistry, Medical College of Georgia, Augusta, Georgia 30912

curriculum. Remediation has often simply involved retaking the course, usually during an intervening summer or one year later when the course is offered again. In the latter instance, the student's graduation may be postponed an entire year, especially if the course involved is prerequisite to other courses. These remedial options have been highly uneconomic and wasteful in terms of time and human potential.

Much of the remediation required to reach criteria-based psychomotor performance can be performed during a course rather than by post-course tutoring or course repetition

For these reasons, therefore, the Department of Restorative Dentistry at the Medical College of Georgia has tried remediation within pre-clinical technique courses, thus giving students an opportunity to improve their grades as the course progresses. The program has been designed to correct inadequate psychomotor performance by further technical practice and subsequent retesting. There is no provision for retesting on written examinations or for retesting on the final practical examination.

The 182 dental students entering dental school 1979-81 participated in a three-course sequence of pre-clinical technique courses offering the in-course remediation program. Requirements for these operative dentistry courses included the

preparation of cavities on artificial teeth to receive various types of single-tooth gold or amalgam restorations. Explicit criteria were prepared for each aspect of each preparation.

Participation in the retesting program was variable. In one course all students who received a grade of 70 or less on a particular assignment were required to do further practice and to take a retest; other students were allowed to retest if they believed they could improve their performance. In the other two courses any student could elect retesting.

The remediation itself featured additional practice and retesting. The student was required to continue to practice until the instructor evaluated the product as acceptable. In some instances the problem was a specific aspect of a cavity preparation and the objective was to improve that particular portion of the performance. In other instances generalized improvement in all categories of the performance was required. The instructor identified the problem by means of the examination feedback report, and emphasized this particular area during practice. Students were also encouraged to critically self-evaluate their performance before presenting their work to the instructor.

After presenting an acceptable product the student received a receipt authorizing a retest, which usually occurred within two weeks of the original examination. Retests were always scheduled outside reg-

ular curriculum hours to prevent conflicts with other course work. This also meant, of course, that students as well as faculty had to make an extra effort to attend these sessions.

Retest projects were graded by two faculty members after a calibration session.¹ They used a criteria-based evaluation form and averaged the two evaluator grades. Percentage grades were converted to letter grades according to the following scale:

- A = 88 and above
- B = 82 to 87
- C = 76 to 81
- D = 70 to 75
- F = 69 or lower

To avoid giving undue advantage to retesting, the final grade for the project was the average of the original and retest grades.

The in-course remediation program was evaluated by changes in the students' graded performance upon retesting, and by the responses to a questionnaire given to the initial class of participating students at the end of their first preclinical technique course.

Over the years of this remediation project, 182 students had the opportunity to take retests on the ten practical examinations required in the three-course sequence. Thus there were 1820 possible person-retesting episodes. Of these, 322 person-retesting episodes were actually conducted. As a result of these 322 retests, 299 (93%) improved their scores on individual tests an average of 9.4 points (Table 1). Of those retesting, 204 (63%) improved their letter grades on individual tests with 67 test letter grades moving from F to D or C (Table 2).

The faculty sought formal feedback from the 62 students participating in the first preclinical technique course in the first year of the

Table 1. Average score improvement per retest by Course and specific test

Course and Test Number	Taking #	Retest %	Average Score of Retesters on Initial Test	Average Improvement on Retest	Percentage Improving Their Score
OPD 511					
Test #1	31	17%	74.6	9.4	94%
Test #2	58	32%	70.5	9.7	93%
Test #3	43	24%	68.3	14.4	95%
Test #4	28	15%	73.8	7.9	86%
OPD 512					
Test #1	27	15%	75.0	6.8	81%
Test #2	21	12%	73.0	5.6	86%
Test #3	12	7%	72.5	7.0	100%
OPD 514					
Test #1	49	27%	73.2	8.6	92%
Test #2	18	10%	75.3	9.8	100%
Test #3	35	19%	72.5	9.7	100%
Total	322		72.4	9.4	93%

Table 2. Changes in Letter Grades on Individual Retests by Course and Test

Course and Test Number	Taking #	Retest %	Improving Letter Grades on Individual Retests						Percentage Improving Letter Grades
			F→D	F→C	D→C	D→B	C→B	B→A	
OPD 511									
Test #1	31	17%	1	2	6	1	11	0	67.7%
Test #2	58	32%	12	2	11	2	7	0	58.6%
Test #3	43	24%	11	4	13	2	4	0	79.1%
Test #4	28	15%	3	1	8	0	1	0	46.4%
OPD 512									
Test #1	27	15%	4	1	5	0	3	0	48.1%
Test #2	21	12%	5	0	1	0	4	0	47.6%
Test #3	12	7%	2	0	2	0	1	0	41.7%
OPD 514									
Test #1	49	27%	8	2	21	1	2	1	71.4%
Test #2	18	10%	1	0	5	2	4	0	66.7%
Test #3	35	19%	4	4	15	2	1	1	77.1%
Total	322		51	16	87	10	38	2	63.4%

program. Of the 60 student respondents to the course evaluation questionnaire, 59 (98%) strongly agreed or agreed that the retesting relieved some of the pressure. Only one respondent disagreed. Fifty-five (92%) students felt that the retest system did *not* give slower students an unfair advantage. Only one student felt that the evaluation system was not fair to all students.

This in-course remediation approach seems to offer four significant advantages:

1. A favorable impact on the learning climate and the student-instructor relationships through the reduction in stress,

2. More one-on-one instruction and practice for the retesting student.

3. Better evaluation of the potential for improvement in the retesting student; thus leading to better retention/placement decisions.

4. Relatively small faculty effort required outside the curriculum hours—estimated at 165 hours aggregate time over the three-year trial.

Not surprisingly, after three years both the faculty and students have found in-course remediation so successful that it has been extended to the remaining three preclinical technique courses and made a permanent feature of the instructional and evaluation program in restorative dentistry. We believe that much of the remediation required to reach criteria-based psychomotor performance can be per-

formed during a course rather than by post-course tutoring or course repetition. This approach seems to offer the possibility of fostering the performance and retention of dental students who might otherwise become discouraged or be lost during the professional educational process. Δ

References

1. Edwards, W. S., Morse, P. K., and Mitchell, R. J., A Practical Evaluation System for Preclinical Restorative Dentistry. *J. Dent. Educ.*, 46:693-696, 1982.

Reprint requests to:
Wallace S. Edwards, D.D.S.
School of Dentistry
Medical College of Georgia
Augusta, Georgia 30912

JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS INSTRUCTIONS FOR CONTRIBUTORS

INTRODUCTION

The Journal of the American College of Dentists is published quarterly in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number. It is the official publication of the American College of Dentists which invites submission of essays, editorials, reports of original research, new ideas, and statements of opinion pertinent to dentistry. Papers do not necessarily represent the views of the Editor or the American College of Dentists.

EDITORIAL POLICY

The editorial staff reserves the right to edit all manuscripts to fit within the Journal space available and to edit for conciseness, clarity, and stylistic consistency. A copy of the edited manuscript will be sent to the author.

PREPARATION OF MANUSCRIPTS

Papers should be in English, typed double space on white 8-1/2 x 11 paper. Left hand margins should be at least 1-1/2 inches to allow for editing. All pages should be numbered.

THE INDEX

The Index Medicus and The Index to Dental Literature should be consulted for standard abbreviations.

The title page should contain: The title of the paper, suggested short titles; the author's names, degrees, professional affiliations, addresses, and phone numbers in a list of four to six key words. All correspondence from the editorial office will be directed to the primary author who shall be named on the title page.

The second page should be an abstract of 250 words or less summarizing the information contained in the manuscript.

Authors should submit two copies of the manuscript and two original sets of illustrations to: Dr. Keith P. Blair, Editor, 4403 Marlborough Avenue, San Diego, California 92116.

Only original articles that have not been published and are not being considered for publication elsewhere will be considered for publication in the Journal unless specifically requested otherwise by the Editor.

REFERENCES

A list of references should appear chronologically at the end of the paper consisting of those references cited in the body of the text. This list should be typed double space and follow the form of these examples:

1. Smith, J. M., Perspectives on Dental Education, *Journal of Dental Education*, 45:741-5, November 1981.
2. White, E. M., Sometimes an A is Really an F. *The Chronicle of Higher Education*, 9:24, February 3, 1975.

Each reference should be checked for accuracy and completeness before the manuscript is submitted. Reference lists that do not follow the format will be returned for re-typing.

REPRINTS AND ORDER FORM

A form for reprints will be sent to the corresponding author after the manuscript has been accepted and edited. He/she then shall inform all other authors of the availability of reprints and combine all orders on the form provided. The authors shall state to whom and where reprint requests are to be sent. Additional copies and back issues of the Journal can be ordered from the Managing Editor of the Journal.

OFFICERS

President

LYNDEN M. KENNEDY
1918-A Skillman Avenue
Dallas, Texas 75206

Treasurer

ROBERT W. ELLIOTT, JR.
8732 Falls Chapel Way
Potomac, Maryland 20854

President-Elect

CHARLES W. FAIN, JR.
320 Harvey Street
Daytona Beach, Florida 32018

Editor

KEITH P. BLAIR
4403 Marlborough Avenue
San Diego, California 92116

Vice President

NORMAN H. OLSEN
311 East Chicago Avenue
Chicago, Illinois 60611

Executive Director

GORDON H. ROVELSTAD
7315 Wisconsin Avenue
Bethesda, Maryland 20814

REGENTS

Regency 1

SUMNER H. WILLENS

Connecticut, Maine, Massachusetts, New Hampshire, New York, Quebec, Rhode Island, Vermont

Regency 5

PAUL S. BUTCHER

Iowa, Kansas, Manitoba, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Oklahoma, Ontario, Wisconsin.

Regency 2

H. CURTIS HESTER

Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania

Regency 6

ROBERT C. COKER

Arkansas, Louisiana, Mississippi, Missouri, Tennessee, Texas

Regency 3

JAMES A. HARRELL, SR.

Alabama, Florida, Georgia, North Carolina, South Carolina, Puerto Rico, Virginia

Regency 7

LEO E. YOUNG

Arizona, Southern California, Colorado, Nevada, New Mexico, Utah, Wyoming

Regency 4

W. ROBERT BIDDINGTON

Illinois, Indiana, Kentucky, Ohio, West Virginia

Regency 8

ALBERT WASSERMAN

Alaska, Alberta, British Columbia, Northern California, Hawaii, Idaho, Montana, Oregon, Washington, Saskatchewan

American College of Dentists
7315 Wisconsin Avenue
Bethesda, Maryland 20814

Return Postage Guaranteed

Second Class Postage
PAID
Washington, D.C.
and Additional Mailing Points

