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The JOURNAL of the AMERICAN COLLEGE of DENTISTS

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 graduate studies and continuing educational efforts by dentists and auxiliaries;

(d) To encourage, stimulate and promote research;

(e) To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;

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

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

(h) To make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge the acceptance of them;

(i) To encourage individuals to further these objectives, and to recognize meritorious achievements and the potentials for contributions to dental science, art, education, literature, human relations or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.

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CONTENTS

FROM THE EDITOR'S DESK

LEADERSHIP

Though the term "leadership" is frequently referred to in many ways, it remains a very nebulous thing to attempt to define just what traits, attributes, abilities and qualities constitute leadership capability.

Some individuals are born leaders who seem to instinctively know what to do and how to do it. Most people, however, must learn how to be leaders by gradually developing and acquiring leadership qualities through training and experience. There are certain characteristics that are usually recognized as necessary for leadership.

Good leaders are able to create new ideas, new methods and new approaches that are useful and effective for providing direction and guidance to the organization. Certainly, they have very definite goals and objectives and a strong sense of purpose to accomplish these aims. They are persistent and assertive in their efforts while, at the same time, remaining receptive to the opinions of others. They are good listeners.

Good leaders enjoy working and seeing the results of their efforts. They love what they are doing and their enthusiasm quickly rubs off on others. A key element in leadership is to motivate others to higher levels of interest and participation so that it is possible to accomplish much more for the benefit of the group. Good leaders have a strong sense of commitment to finish whatever they start and to see their work through to completion.

Keith P. Blair

Maturity, responsibility and integrity are the hallmarks of good leaders and undoubtedly are the most necessary traits for leadership. Mature persons do not need frequent praise and recognition to do their work. Responsible people do not need others to encourage and supervise them. Those with integrity are true to their word: when they say they will do something, it will get done.

Good leaders recognize the trust, the influence and the power that can go along with leadership. They manage to gently assume this authority and to conduct their work in a fair, positive and responsible way. Good leaders do not abuse their positions of leadership.

One thing that should be definitely emphasized is that merely holding office does not, by itself, demonstrate leadership. *It is what the individual accomplishes while in office that shows leadership.* Many would-be leaders point to their long list of offices held over the years as a record of their achievement and leadership, but they may have been hardly more than caretakers in many of those positions.

Leadership is *ACTION,* not just holding office. It is creating, motivating and achieving to reach attainable goals. Good leadership is essential for the success of every organization.△

Keith P. Blair

CLINICAL DENTAL ETHICS: DEFINING AN ETHIC FOR PRACTICING PROFESSIONALS

Mark Siegler*
David L. Schiedermayer**

Physicians and dentists share similar scientific backgrounds, pursue similar treatment goals, and confront similar moral dilemmas in the day-to-day care of patients. An ethic for practicing professionals must focus on the act of clinical decision-making with and in the interest of the patient. Clinical ethics offers a useful and practical way for medical and dental professionals to integrate clinical experience with teaching, research, and practice activities. Because of their technical knowledge and involvement with patients, physicians and dentists are in the best position to practice and teach clinical ethics.

As physicians, our background and expertise is limited to the field of medicine and clinical medical ethics. Therefore, it is only with some trepidation that we attempt to extend our observations to dentistry and dental ethics. We are willing to take this risk because we believe strongly that medicine and dentistry are closely-related health professions and that they share far more similarities than differences. In particular, they are similar in their scientific orientation; in the personal responsibilities of practitioners to individual patients; in the goals of practice; and also, in the tensions that exist for conscientious practitioners who face multiple, conflicting allegiances. All of these factors are important in the definition of a clinical ethic, so we will begin by exploring each of them in turn. We will then define a clinical ethic and outline a curriculum for teaching clinical ethics. Finally, we will conclude that for both medicine and dentistry, training students in practical, case-based clinical ethics will best serve the needs of the professions and their patients.

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Relationship of Medicine and Dentistry

Shared Background of Physicians and Dentists

Despite the almost entirely independent educational and practice systems for physicians and dentists that exist in the U.S., the professions of medicine and dentistry are closely intertwined.[1-3] The emphasis in both professions on human anatomy and physiological function creates a natural intellectual bond between them. In fact, oral surgery as practiced by those holding the DDS degree is closely related to and often overlaps with ENT surgery and with plastic and reconstructive surgery as practiced by those holding the MD degree. Similarly, the actual practice of general dentistry more closely resembles the practice of a medical or surgical subspecialty than either medicine or dentistry resemble, say, modern psychoanalysis or sex counseling.

Shared Responsibilities of Physicians and Dentists

The central responsibility of clinicians—dentists or physicians—is to use technical expertise to respond to a patient's request for help by:

(1) accurately diagnosing the patient's condition;
(2) informing and educating the patient about the condition —including its prognosis if

treated or untreated—and about the various possible treatment alternatives;
(3) recommending the course of action that the clinician considers the best technical approach for that individual's problem; and
(4) carrying out with technical skill those procedures—for example, further diagnostic studies or treatment—that are required by the approach chosen by the patient or, if the patient cannot choose due to incompetence, those procedures that are in the patient's best interest (and are consented to by an appropriate surrogate).

In making a recommendation about clinical care, physicians and dentists evaluate the individual patient in terms of:

(1) the seriousness of the condition in an organic sense;
(2) the seriousness of the condition in the patient's eyes;
(3) the need for urgent action;
(4) the possible therapeutic benefits;
(5) the potential risks of the intervention;
(6) alternative courses of action and inaction;
(7) the physical, psychological, and social impact upon the patient of all options;
(8) the ability of the patient to participate in his or her own care; and
(9) the patient's values, beliefs, self-understanding, fears, and hopes.

Finally, clinicians are called on to reach a clinically and morally appropriate decision—one that is suitable for the particular person whom they are treating and is based on clinical judgment[4-7]. Physicians and dentists share this complex set of responsibilities and also share a quest for technical and moral excellence in their professional performance.[8]

. . . clinicians are called on to reach a clinically and morally appropriate decision—one that is suitable for the particular person whom they are treating and is based on clinical judgment.

Shared Goals of Physicians and Dentists

Physicians and dentists also share common goals in treating patients. There is no single goal of medicine or dentistry. In the encounter between patient and clinician many appropriate goals are pursued simultaneously. These goals include:[9]

1. Restoration of health
2. Prevention of disease
3. The relief of symptoms (including physical distress and psychological suffering)
4. the restoration of function or the maintenance of compromised function
5. The education and counseling of patients regarding their condition and its prognosis
6. The saving or prolonging of life.
7. Avoiding harm to the patient in the course of care

In general, patients and clinicians both regard the ideal endpoint of a clinical encounter to be the identification and successful treatment of an entirely curable condition. Some believe the prevention of disease is an even greater benefit to both patient and clinician.

Essential to sound clinical judgment by physician or dentist is a realistic understanding of the goals of treatment. In a clinical case, ethical deliberation should begin with a clear and realistic evaluation of the goals of intervention for the patient being treated. Which goals are desired from a clinical encounter should be determined jointly by patient and clinician after the patient has been informed by the clinician which goals are possible.

In defining the goals of the encounter, the clinician will consider:

1. *The nature of the disease.* What goals are achievable for this particular patient with specific condition? What tradeoffs must be made among the possible goals, for example, between relief of suffering and maximal preservation of function? Of course, any such determination in medicine or in dentistry must be expressed in probabilities rather than certainties.
2. *The preferences of the patient.* What are the patient's goals in this encounter? In many instances, the patient's goals are the same as the clinician's. It must be acknowledged, however, that for personal, psychological, social, religious, or economic reasons, the patient's goals may differ from those of the clinician.
3. *Social, cultural, political, and economic realities.* Any goals sought by clinicians and patients are pursued within a context of social, cultural, political, and economic realities. Access to scarce resources, the wealth or poverty of individuals and communities, and religious and cultural beliefs will facilitate the attainment of some goals and render others impossible.

Essential to sound clinical judgment by physician or dentist is a realistic understanding of the goals of treatment.

Shared Tensions in Medicine and Dentistry

Because medicine and dentistry are both practiced within a complex social-professional-economic context, there is one other important similarity between the two professions and their ethical responsibilities. Both dentists and physicians frequently are faced with multiple allegiances: first, to patients; second, to themselves as individual agents; third, to their profession; and fourth, to society. We don't mean to establish a hierarchy among these four competing allegiances (although the one we described is not bad as a first approximation), but rather to indicate that these competing allegiances exist in almost every clinical encounter and their existence often generates clinical-ethical dilemmas.

The ethics of dentistry should focus on these fundamental patient care issues—on the responsibility of dentists; on the ways in which clinical goals are decided-on through negotiations and accommodations between dentists and their patients; on the ways in which clinical decisions are reached by balancing clinical indications and patient values; and on the tensions that are created, inevitably, by the multiple allegiances that all dentists confront in their encounters with individual patients. These are the issues that would contribute to a "clinical ethics" for clinical dentistry. We will illustrate a few of these issues with some case examples.

Practical Case Examples

We mentioned earlier that we are physicians and have limited knowledge about the practice of dentistry. Nevertheless, we are clinicians who appreciate the importance of actual cases in discussions of ethics. We will illustrate the importance of cases by way of six personal experiences that seem to raise interesting and practical clinical ethical questions.

Example 1. (M.S.) "When I was a kid, I spent several hours a week from the ages of 9 to 13 in a dentist's chair. I was told that I had "a mouth full of cavities." When my dentist died prematurely and unexpectedly, I began seeing a new dentist who immediately informed me that all the dental work in my mouth was of inferior quality and had to be replaced. Was the ethical problem in this case poor quality of care by the first dentist or hypercritical and perhaps non-professional comments by the second?"

Example 2. (M.S.) "Twenty years ago, Dr. Thomas Starshak, a wonderful, kind man, a marvelous dentist, and a pioneer in the field of modern endodontics, informed me that I had a small cyst at the apex of one of my front teeth and that it should be treated with endodontics. I hesitated and argued that it was asymptomatic and had been there since the tooth was injured when I was six years old. On several later occasions Tom urged me to have the work done and on each of those occasions I refused. Recently the cyst enlarged and an asymptomatic abscess developed. Dr. Frank Weine, a highly regarded Chicago endodontist, is attending to it with great skill. The ethical issue here regards the interesting tension between clinical indications for treatment and patient preferences, a matter which I suspect occurs with great frequency in dentistry."

Example 3. (D.S.) "Interestingly, I have also had a small cyst associated with one of my front teeth (also from a childhood injury). I went to see one of my friends who was a dental student. She obtained X-rays and informed me that the tooth should be extracted and that I would require major bridgework. She also told me that while she needed to learn how to make this particular kind of a bridge, she knew her work would be less aesthetically pleasing than that of an excellent dentist in town who was not associated with the dental school. Her honesty and friendship prevailed over her need for a "good case" and she referred me to a superb dentist who did a wonderful job. There are several issues here: what are the obligations of dental faculty and students in patient referral? What information should patients in dental schools have regarding their student's level of expertise? How much risk should patients have to assume in order to train students? How much risk should patients have to assume in order to receive dental care from students for free or at a reduced price?"

Example 4. (M.S.) "Many years ago I received a lingual nerve block for some dental work. The needle traumatized the lingual nerve and for several weeks thereafter I had no sensation on one side of my tongue and mouth. Possibly as a result of the injection, I developed a deep tongue ulcer which resulted in a cervical lymphadenitis and a generalized viral infection consistent with either EB virus or herpes (both titers were elevated). Was the lingual block the cause of this strange syndrome which included daily fevers and sweats, prostration, and a clinical hepatitis, all of which lasted for a month? The interesting ethical issues here relate to questions of causation, responsibility and liability. They also touch on questions of bad outcome even when the most meticulous technical skill is used.

Please don't misunderstand me. The case I am talking about never involved a lawsuit or even a discussion of one. Rather, it concerned the more general problem of how we as professionals should deal with bad outcomes that are associated neither with negligence nor malpractice. How should we determine our responsibility for such

events? How, if at all, should such injuries be compensated?"

Example 5. (D.S.) "My dentist, who is technically skilled and has a comfortable manner (and chair), is not very busy at present. When I discussed this with him on one visit he pointed out that dentistry is the one health profession in which successful disease prevention has adversely affected the economics of the profession. He reminded me that none of my children have cavities, that our water is fluoridated largely due to the efforts of the dental profession; and that fluoridation along with the proper use of toothbrush, toothpaste and floss has markedly diminished the need for bread-and-butter dental care.

I wondered—if we in medicine had lobbied against cigarettes as effectively as dentists lobbied for fluoride, how full would *my* office be? What kind of financial sacrifices should professionals be willing to make in order to be patient advocates? What implications do effective preventive measures have for the supply (or oversupply) of professionals?"

Example 6. As physicians we look after many patients, some of whom are very poor and lack health insurance. The poor in this society receive a different level of medical care from those who have the means to pay for high quality services. We often think about issues of access to care and about the quality of care given to those who lack the resources to pay for high quality care. Such questions arise frequently in medical offices. We are certain they also arise in dental offices.

We could go on and on, drawing from our experiences as dental patients, as the fathers of children undergoing orthodontics, as physicians, medical educators, and researchers. Our point is that there is a rich source of material in the real world of dental practice and dental education that should serve as the basis for training students and practitioners in clinical dental ethics. A clinical ethic must grapple with the real problems which arise in everyday patient care.

Defining a Clinical Ethic for Practicing Professionals

Clinical ethics seeks to identify, analyze, and resolve the ethical, value, and legal concerns that confront patients, clinicians, and researchers in their daily interactions with each other and with health care institutions.

Clinical ethics focuses on decision-making—the process and outcome of decision-making. Clinical ethics explores the clinician's central task: the act of clinical decision-making with and in the interest of the patient. Real day-to-day clinical practice and its concerns are the central issues in clinical ethics.

Clinical ethics offers the clinician a useful and practical way to integrate clinical experience with teaching, research, and practice activities.

Clinical ethics offers the clinician a useful and practical way to integrate clinical experience with teaching, research, and practice activities.[10]

The Relationship of Practice and Ethics

We often lose sight of the relationship between excellent clinical practice and clinical ethics, but the relationship is vitally important. In our opinion, skilled clinical practice is at the heart of the ethical practice of medicine and dentistry. The ability to treat patients allows the health professional the privilege to treat them, and this provides an opportunity to treat people in an ethical way. All the compassion in the world does not make up for an inadequate treatment plan. To

. . . skilled clinical practice is at the heart of the ethical practice of medicine and dentistry.

practice ethical medicine, the clinician's first obligation is to become competent technically. The first kindness is competency.[11] The ethical issues involved in caring for patients can never be separated from the technical act of caring for the patient.[12]

Further, the health professional's role is unique. Once sought out by the patient, the physician and dentist become involved in the patient's problem. They are never again mere observers. The obligation and role of professionals are quite different from those of theoreticians and armchair analysts.

The Roman General Lucius Paulus captured the important distinction between the theoretician and the involved participant when he stood before the Roman Senate 2000 years ago to respond to those who had criticized his military strategy in a battle in Carthage. He stated: "Commanders should be counselled, chiefly, by persons of known talent; by those who have made the art of war their particular study, and whose knowledge is derived from experience; by those who are present at the scene of action, who see the country, who see the enemy; who see the advantages that occasions offer, and who, like people embarked on the same ship, are sharers of the danger. If, therefore, anyone thinks himself qualified to give advice respecting the war which I am to conduct, which may prove advan-

All the compassion in the world does not make up for an inadequate treatment plan.

tageous to the public, let him not refuse his assistance to the state, but let him come with me into Macedonia. He shall be furnished with a ship, a horse, a tent; even his travelling charges shall be defrayed. But if he thinks this too much trouble, and prefers the repose of a city life to the toils of war, let him not on land assume the office of a pilot. The city, in itself, furnishes an abundance of topics for conversation."[13]

Soren Kierkegaard, the Danish philosopher, illustrates the difference between theoretical and applied knowledge by way of a similar example, which should be a caution to all who would propose an ethical perspective of medicine and dentistry which is removed from the actual practice setting:

"Let us imagine a pilot, and assume that he had passed every examination with distinction, but that he had not as yet been at sea. Imagine him in a storm; he knows everything he ought to do, but he has not known before how terror grips the seafarer when the stars are lost in the blackness of night; he has not known the sense of impotence that comes when the pilot sees the wheel in his hand become a plaything for the waves; he has not known how the blood rushes into the head when one tries to make calculations at such a moment; in short, he has no conception of the change that takes place in the knower when he has to apply his knowledge."[14]

The Need for Involvement by Clinicians in Clinical Dental Ethics

As illustrated by the above, a clinically-based approach to ethics and clinical decision making is essential if our aim is to improve professional education and patient care. We must move from the theoretical to the practical, from potential problems to the real problems of patients and clinicians. While a multidisciplinary approach to ethics is often helpful, it is necessary and desirable for clinicians to take leadership roles in clinical ethics for the following reasons:

1. Clinicians are in the best position to identify practical problems which non-clinicians may not perceive. Clinicians can understand clinical, ethical, and legal problems within the context of the clinical situation rather than simply as isolated philosophical or ethical questions unrelated to clinical activities.
2. Clinicians, because of their technical competence, their involvement and responsibility for patients, and their respected status as role models, are in the best position to teach clinical ethics to professional students. Frankly, clinical ethics will become an integrated part of clinical decision-making in medicine and dentistry only if it is taught at the bedside and in the office by respected practitioners as part of the daily teaching of medicine and dentistry. There is evidence that clinicians prefer being taught ethics by other clinicians[15] and it is very encouraging to note that many dental school programs in formal dental ethics are supervised by dentists.[16] We think it is important that teaching should be interdisciplinary, because the expertise of philosophers, theologians, lawyers, and others can enrich the teaching program. But for the reasons we have discussed earlier, we think that while ethics courses can and should be taught in a multidisciplinary fashion, the curriculum should focus on clinical ethics. One such curriculum was delineated in the DeCamp report on basic curricular goals in medical ethics.

Basic Curricular Goals in Clinical Ethics

The DeCamp Report on basic curricular goals in clinical ethics was the result of a working group of physicians, philosophers, and medical ethicists who met at Dartmouth in July, 1983.[17] The group agreed that "the basic medical ethics curriculum should be centered on the kinds of moral problems that physicians encounter most frequently in practice rather than on sensational cases which occur only rarely." They also agreed that the content of the curriculum should address several different kinds of learning:

1. The clarification of central concepts (e.g., the patient's competence to consent to or refuse treatment);
2. The understanding of important decision-making procedures (e.g., how to determine when it is morally justified to treat an unwilling patient);
3. The ability to apply concepts and decision-making procedures to actual cases; (e.g., teaching and observation during ward rounds and daily practice) and
4. The acquisition of certain interactional skills (the ability to discuss with a patient and family his or her wishes in difficult circumstances).

After discussing the importance of a rigorous and precise curriculum, the interdisciplinary group focused on eight major ethical abilities which they believed a clinician should have:

1. The ability to identify the moral aspects of practice.
2. The ability to obtain a valid consent or valid refusal of treatment.
3. Knowledge of how to proceed if a patient is only partially competent.
4. Knowledge of how to proceed if a patient refuses treatment.

5. The ability to decide when it is morally justified to withhold information from a patient.
6. The ability to decide when it is morally justified to breach confidentiality.
7. Knowledge of the moral aspects of the care of patients with a poor prognosis.
8. Knowledge of patterns of access to health care and the nature of barriers to adequate health care.

While this list is not all-inclusive, it remains an excellent first approximation of a concrete curriculum in clinical medical ethics which would apply with some modifications to dentistry. For example, each of the clinical cases and questions we proposed could be discussed under one or several of these broad headings. When values conflict—practice values, aesthetics, economic considerations—dentists must make difficult decisions which require a ranking of value categories in clinical dental ethics.[18]

Conclusion

Physicians and dentists are clinicians who use clinical judgment and technical expertise to help individual patients. Clinical ethics should focus on day-to-day patient care issues; clinical ethics is concerned with the central task of clinical decision-making with and in the interest of the patient. Since the relationship of practice and ethics is vitally important, a clinically-based approach to the teaching of ethics is required if our aim is to improve patient care.

. . . clinical ethics is concerned with the central task of clinical decision-making with and in the interest of the patient.

Academic medicine has begun to recognize the importance of training physicians in the discipline of clinical ethics. For example, with the support of the Department of Medicine, the Andrew W. Mellon Foundation, and the Henry J. Kaiser Family Foundation, one of us (M.S.) was recently able to establish the first Center for Clinical Medical Ethics in the United States at the University of Chicago Pritzker School of Medicine. The other (D.S.) has studied there, and is now the Associate Director for the Center for the Study of Bioethics at the Medical College of Wisconsin. The goal of both of these centers is to improve patient care by teaching and research programs in clinical ethics; the curricula of our programs are similar to the model curriculum described in the DeCamp report.

We know there are career opportunities for physicians in the field of clinical ethics. The Center for Clinical Medical Ethics started the first clinical ethics fellowship training program in the country in July 1985; three fellows have completed their training and have assumed teaching and research positions. Four more clinical ethics fellows are studying during the current academic year (1987–88). We hope there will soon be similar clinical ethics training programs in dental education, and we suspect there will be academic career opportunities for those dentists interested in combining their practical skills with ethical reflection. We encourage some academic dentists to pursue careers in clinical ethics in the same way they would pursue careers in any academic dental subspecialty.

We have offered this analysis because we think the need for a clinical ethic is clear. Medicine and dentistry both require an ethic for practicing professionals. It is imperative that we begin now to develop effective programs which provide clinical training in clinical ethics for our students and practitioners. △

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AAAS SYMPOSIUM "ETHICALITY

"Ethics in Academe"

Paul Goldhaber*

Background

The recent rash of unethical and/or fraudulent behavior cases within such diverse areas as government, business, and medical research has stimulated thoughtful individuals to ask, "What are universities doing to counteract this destructive pattern?" The common perception is that we are in the midst of a decline in ethical standards and concern for others in society, implying that things were better in the "good old days." History does not lend credence to the notion that the past was any better than the present. Recall, if you will, the scandals of President Harding's Administration in the early 1920's which involved the Department of Justice, Navy, the Veterans Bureau, and the Office of the Alien Property Custodian. How about the big investment bankers at the turn of the century? To quote William Miller from his "A New History of the United States,"[1] "a spectacular investigation of New York insurance companies in 1905 by a legislative committee counseled by the brilliant lawyer, Charles Evans Hughes, disclosed incredible irregularities in the financiers' handling of insurance funds and sent many of the lesser financial fry to jail. The Morgans and Rockefellers, both deeply involved in the revelations, escaped punishment by the law, but fell a few more notches in public esteem."

However, the fact that the ethical standards of the past were no better than those of today does not invalidate the need for seeking better means of improving the current situation.

The Dental Profession

The dental profession is not immune to such charges and dental schools must re-examine and reassess their role in attempting to maintain high ethical standards and a genuine concern for others in society. This paper will address the ethical behavior of students, faculty, and administrators, but will also touch on some actions of some dental practitioners.

Influence of Family

First, though, I must emphasize my personal bias regarding the teaching and learning of ethical behavior.

It is my contention that the basic foundation for "proper" ethical behavior and concern for others is built during one's earlier years prior to starting college and that the most important influence during those formative years is the attitude, teachings, and examples of one's parents. By the time one enters college (or the armed forces, or the work force), a period when parental oversight is significantly diminished due to geographic separation, the individual must cope with different ideas and mores. Depending on how well developed his or her pattern of ethical behavior is at this stage, acceptance or rejection of behavior contrary to one's "code of ethics" results.

I also suspect that if a change in ethical behavior does take place during these "post-parental" years, it is more likely that in most cases the change will be in the direction of "good" to "bad," rather than the reverse. The need to resist unethical influences is implied by the common, cryptic warning of the wise and experienced to the young and naive: "Just wait until you get out into the *real* world!"

However, while I see little hope or evidence that individuals who

Continued on page 12

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ON IN DENTISTRY"

Ethical Conduct in Professional Administration

Erik D. Olsen*

I come to this discussion from a unique and limited perspective. I serve as the chief executive of a large corporation, providing dental insurance to some seven million patients; but I also have a background of dental practice and continue an active role in dental organizational matters. My first formal contact with "dental ethics" came in the '60s as a young dental student and then upon entering practice and joining my local dental society. Things seemed simpler then—I recall that our main ethical concerns were about the size of the sign you could put in front of your office and that you weren't supposed to criticize the work of another dentist. Even the ADA's code seemed simple: "The dentist's primary professional obligation shall be service to the public."

Business ethics is more complex for two main reasons. First, we deal with more publics. In a 1986 "Statement of Principles,"[1] Washington Dental Service (a sister Delta Plan) lists seven publics to which it "recognizes responsibility:"

Community
Dentistry
Group Purchasers
Group Employees
Member Dentists
Staff Members
Corporation

All of these publics need and deserve special ethical attention.

Many administrators are also managers and thus are responsible for the actions, including ethics, of many subordinates. This difficult task can be accomplished in three ways. First of all, the chief administrator must set the ethical mood of the organization through example. The importance of reacting ethically to business problems must constantly be stressed and communicated. Next, a formal written policy on ethics should be established including guidelines for common situations and methods for reporting ethical problems, including those involving one's immediate superiors. Lastly, when a breach of ethics does occur, a swift and appropriate response must be made to make it clear to all that the organization means what it says about ethics.

The second reason revolves around the "competition" in the world of business. With many firms—up to 200 in the dental insurance field—seeking the same contracts, the potential for ethical conflicts grows exponentially. Let me emphasize that I am not suggesting that competition is a bad element of our delivery system; quite the contrary, one has only to view the current disarray of the non-competitive delivery systems of many of the socialized industrialized countries to realize that our free competitive system, while perhaps slower to react, reacts in a more natural and eventually effective manner.

Dentists, whose professional culture has led them to be open to sharing treatment advances, have been slow to recognize that the need for confidentiality in the competitive marketplace is not per se unethical. Just last year, California Delta was developing a new and different dental program model. We spent over a year in its development and refinement, utilizing all manner of experts, both dental and consumer. But, in order to be first to market with our program, we did not share the development process with the general dental public—at least some of whom are employed by our competition. This "secretiveness" caused a loud hue

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have developed unethical behavior habits prior to entering college can or will change this pattern as a result of remedial action during the college or graduate school experience, I, nevertheless, believe that some initiatives are in order, if only to diminish the rate of behavior transformation from "good" to "bad."

Role of Formal Courses

My skepticism about formal courses in applied or professional ethics seems to be supported by Terrance Sandalow, Dean of the Law School at the University of Michigan, who is quoted in the March 4, 1987 issue of the *Chronicle of Higher Education*.[2] He stated, "A university cannot inculcate the attitudes and values that either regards as appropriate merely by requiring students to register for a prescribed course, as it might if the task were only to assure that every graduate understands trigonometry or is acquainted with a set of ethical precepts. If the university is to be held responsible for the moral development of students, as moral development is understood by both conservative and liberal critics, a pervasive commitment to that end will be required."

So what can the university do to counteract a decline in ethical standards and concern for others in society? With regard to the "concern for others" issue, the health professional, more than most other types of professionals, should have the strongest sense of commitment to this central issue. Concern for others is the health professional's *raison d'etre*. Therefore, we should rightfully expect the health professional to behave ethically towards his/her patients.

According to Fox and Swazey (as quoted by Van Rensselaer Potter in the Winter 1987 issue of *Perspectives in Biology and Medicine*, p. 163),[3] medical bioethics should include "values like decency, kindness, empathy, caring, devotion, service, generosity, altruism, sacrifice, and love." Presumably, the dental student learns the importance of these qualities through interaction with his or her patients in the clinical setting under the guidance of faculty supervisors. For the private practitioner, these qualities have taken on an even greater significance, since having these attributes may be just as important (if not more so) in determining eventual success or failure of the practice as is the practitioner's professional skill and brilliance. It should be no surprise, therefore, that "practice management" courses are the most numerous and popular of all continuing education courses offered to dentists. The question that is difficult to answer is whether the practitioner's display of "decency, kindness, empathy, caring, . . ." is real or merely a facade. How would the patient know whether the services performed were actually required or if the procedures carried out were done in a proper or shoddy manner? In most instances, the patient (or "client," in other fields) would have to depend on the honesty and skill of the professional (hence, the increased popularity of "second opinions" in the health field).

The "Robin Hood Syndrome"

With that long preamble, I shall now cite a concrete problem afflicting the dental profession for which I shall offer some concrete steps to be taken at dental schools. The seriousness of the problem was recently brought home forcibly when I met a dental colleague who had just started working for Blue Cross/Blue Shield checking dental insurance claims. When I asked him how things were going, he responded, "Terribly!" He went on to explain that just that week he had come across six claims wherein dentists had falsified the actual date of a particular dental procedure they had performed for their patients in order to make them eligible for reimbursement by the insurance company. In other words, they had committed fraud!

I have thought about this type of problem quite a bit lately because I am convinced that some of the perpetrators are not necessarily benefitting personally from this action, but believe they are helping their patients save money. I have decided to dub this problem the "Robin Hood Syndrome." Clearly, our folklore has not only legitimized, but actually applauds, the concept of robbing the rich to pay the poor. "Insurance companies are large and have lots of money. Certainly, my patient needs it more than they do. What harm is it if I make it possible for him to be reimbursed? Don't I have an obligation to help my patient whenever possible?" I am sure that the Robin Hood Syndrome exists in many guises in all professions, particularly when the victim is a large, wealthy, and faceless institution or organization. I have little doubt that unauthorized free care is dispensed by students and faculty in dental school clinics. By some faulty rationale they have probably convinced themselves that such behavior towards their patients reaffirms their own "decency, kindness, empathy, caring, . . . etc." The strong attraction of the Robin Hood Syndrome is that it allows one to help someone in need without utilizing one's own assets.

Clarifying and Enforcing the Rules

Counteracting such behavior requires clear definition and explanation of clinic rules and their strict enforcement. A series of seminars should be developed in all schools to make sure that the students fully comprehend the ethical and legal implications of the Robin Hood Syndrome and other forms of unethical behavior.

Speakers should include representatives from the dental insurance industry who would describe in detail the types of fraud they have uncovered and have prosecuted. Other speakers should include members of the State Board of Registration in Dentistry who would describe actual cases of dentist misconduct (including the use of drugs, sexual harassment of patients, etc.) that have led to the withdrawal of the dentist's license to practice. The objective of these seminars would be to make sure that students are fully aware of the sorts of behavior that are considered to be unethical and that ignorance cannot be used as an excuse for misbehavior.

Different Priorities in Teaching Medical and Dental Students

While concern for others is the health professional's *raison d'etre*, various circumstances may alter the health professional's priorities. Presumably, the dental student learns the importance of "decency, kindness, empathy, caring, . . ." through interaction with his or her patients in the clinical setting under the guidance of faculty supervisors. It should be emphasized, however, that the teaching of medical students in a hospital is ordinarily a by-product of patient care, whereas patient care in a dental school is usually a by-product of the teaching program. Dental visits are customarily scheduled to satisfy the clinical requirements and abilities of the student, thereby leading to protracted or incomplete care. In addition, patients "belong" to the student rather than the faculty supervisor, creating a potentially serious conflict of interest for the student. Such circumstances may give rise to a self-centered health care provider rather than one who considers the patient's needs foremost.

"Ideal" Treatment

A common failing in dental school teaching is to equate "ideal" treatment with the most complex treatment, without regard to the patient's desires, needs, or ability to afford or maintain the recommended therapy. Patients should be offered several alternative treatment plans with explanations of the advantages and disadvantages of each. This is what is meant by *"informed consent"*.

Avoiding Self-Centered Dental Students

Dental educators can attempt to prevent the development of the self-centered dental student by concentrating more on *comprehensive* patient care, or modifying the clinical teaching program by involving faculty directly in delivering patient care together with students, or by minimizing clinical teaching in dental school clinics and maximizing clinical teaching in affiliated hospitals and neighborhood health center clinics where the needs of the patient come first. At Harvard, dental students work on patients in the Dental School Clinic during the entire third year of their five-year program. During their fourth year, they spend a total of five months as dental externs working in the Dental Departments of the Massachusetts General Hospital, the Children's Hospital Medical Center and in one of five Veterans Administration hospitals in the Greater Boston area. At these facilities our students treat patients with a wide variety of oral problems. Many of these patients may simultaneously be suffering from other medical complications, neuropsychiatric problems, or other handicapping conditions.

Exposing HSDM Students to Different and Needy Cultures

In addition to the above examples of exposing our students to the needs of others away from the School Dental Clinics, the Harvard School of Dental Medicine is now in the process of implementing a new elective experience for our fifth year students. This will take the form of a three- to five-month international experience in a developing country where the student will be involved in oral health care delivery research and/or service. The objective of this program is to expose our students to other cultures and to situations where only limited resources are available for health care services. One of the constraints we have placed on this program is that the international experience should not require the student to pay for travel or room and board. We believe that these conditions will be met by the three organizations with whom we have been planning these activities:

1. *Project Hope* will support travel and room and board for one student per year to go to the People's Republic of China to set up preventive dentistry programs under the direction of our Professor and Head of the Department of Operative Dentistry. This program has recently been implemented and one of our students is

currently doing research and patient care in China.

2. *The Peace Corps.* A contract has been signed by the Peace Corps and the Harvard School of Dental Medicine agreeing to a joint program wherein HSDM fifth-year students will spend five months doing research and/or patient care in a country (or countries) currently involved with the Peace Corps. This program will start during the 1988–89 academic year. Initial inquiries indicate that 3 to 4 of next year's 5th-year students will volunteer for this elective experience.
3. *The United States Indian Health Service*—An agreement has been reached between the U.S. Indian Health Service and HSDM that will allow one of our students to spend 5 months on an Indian reservation to carry out research and patient care. Although working on an Indian reservation may not be exactly the same as having an international experience abroad, it will expose our students to a different culture under conditions that are far from ideal. We have identified one student who plans to take this elective during the 1988–89 academic year.

The Value of An Internship After Dental School

Unlike the new graduate from medical school, the new graduate from dental school has no obligation to take a year's internship or residency program and may go directly into private practice after passing the State Board's Licensing Examination. While this pattern might have sufficed in the past, it is certainly questionable today. In addition to its obvious advantages in improving and extending clinical skills, a postdoctoral internship or residency program before entering practice should help promote the "socialization" of the dentist and reaffirm the centricity of the patient in the dentist's thinking. Unfortunately, not enough dental internships and/or residency programs are available in the country to accommodate all new dental graduates should the rules be changed to require such additional training before entering practice.

Fraud and Sloppiness in Biomedical Research

We do not know how much fraudulent medical research took place in the "good old days." Suffice it to say that revelations about recent cases have shocked and rocked universities, hospitals and research institutes, as well as federal and private agencies that support biomedical research. An astonished public is justified in asking "How can a scientist even think of making up data and falsifying records when the essence of research is the quest for Truth? Besides, won't he or she eventually be found out when others try to repeat the experiments? These are rational questions. Unfortunately, some of the extreme cases that have hit the public press in the past few years indicate that the perpetrators of these acts are not rational individuals. Indeed, in at least one case, the individual had conducted similar deceptions at another university at an earlier stage in his career.

While these extreme cases of fraudulent behavior may be relatively rare, some other questionable laboratory practices seem to be much more prevalent. Perhaps the most common cause is just plain sloppiness, where inadequate care is observed in carrying out the experiment or in recording the data. Failure to repeat an experiment to ensure that the results can be duplicated is frequently due to the desire to get into print as quickly as possible in order to beat out the competition.

The Pressure to Win the Research Race

But why the rush? The answer is that "coming in first" is just as important for the biomedical researcher as it is for the athlete. Henry Rosovsky, former Dean of the Faculty of Arts and Science at Harvard, has recently written (New Republic, July 13 & 20, 1987).[4] "An unusual characteristic of American university life is its competitiveness. Institutions of the same class compete for faculty, research funds, students, public attention—and much else" . . . "However, the benefits of American-style competitions among universities outweigh the costs. It has prevented complacency and spurred the drive for excellence and change." Clearly, university administrators are not loath to having their faculty members "come in first." Indeed, this is what they seek out and reward. This is implied in the next quote from Rosovsky's article, "All of the schools correctly assume that the quality of the faculty is the most important factor in maintaining their reputation and position. The best faculty attracts the finest students, produces the highest quality research, and gains the most outside support."

"Gaining the most outside support" are the critical words. Outstanding teaching *per se* doesn't bring in grant support and may explain in part the low priority of teaching in health professional schools when considering a faculty member for promotion to tenure.

Modern biomedical research can no longer be done with inexpensive mice, a scalpel, suture material, scissors, a balance, and careful observation, as was done in Peter Medawar's day 25–30 years ago when he won the Nobel Prize for his

work on transplantation immunity. Indeed, it is doubtful that a biomedical research grant application would be funded today if the protocol doesn't call for the use of complex and expensive laboratory equipment. How is this equipment to be funded if not from grants? It's a "Catch 22." From the administrator's point of view, the indirect costs that accompany research grants are just as important as the direct costs since they help pay for a proportionate share of the building maintenance as well as the administrative costs incurred by the research project. If the grant is lost, the empty laboratory costs must be absorbed by the institution. Marcia Angell (Annals of Internal Medicine, 104:261–262, 1986)[5] believes that "because of promotion and funding of physicians in academic medicine are closely linked to the number of their publications, investigators feel impelled to publish as frequently as possible." While she is not sure that such pressure is responsible for plagiarism or fraud, she is certain that it leads to such practices as repetitive publication, selective reporting of data and the cutting of corners. Her major suggestion for reform is to limit the number of papers reviewed for promotion or funding. On the other hand, Patricia Woolf (Chronicle of Higher Education, September 23, 1987)[6] maintains that the pressure to publish is "neither a necessary nor a sufficient cause of research malpractice." She goes on to state, "Fraud has occurred in the absence of pressure, and pressure has been exerted without subsequent fraud. No real evidence exists that the pressure to publish has been so severe that it impaired the researchers' ability to distinguish right from wrong." She calls for research supervisors to establish and enforce strict standards in their laboratories, concluding that, "it is up to established professionals to make aspiring researchers aware of the pressures, and to teach by example the principles that will enable younger scientists to resist any temptation to do opportunistic or shabby work."

Although there is nothing new about this recommendation, it is worth re-emphasizing in view of its long tradition and practicality.

Other Ethical Problems in Academe

Lack of time prevents me from touching on other examples of unethical behavior in academe, such as sexual harassment and drug and alcohol dependency. How often does this take place? I don't know, but I have the impression that it occurs more often than most faculty and administrators believe or are willing to admit.

Concluding Remarks

In attempting to understand and prevent unethical behavior within the practicing dental profession, it is likely that everyone will try to "pass the buck." The practicing dentists will blame the dental schools. The dental schools will blame the colleges, high schools and the family environment (as I have done in part), and the mistreated or neglected patients will blame the practicing dental profession. In truth, they are all correct, in part. The molding of a health professional's behavioral pattern is influenced to different degrees by many forces exerted throughout his or her early and subsequent character development.

Dental schools have the obligation to establish clear and proper ethical guidelines for their students and faculty. Those who cannot conform must be weeded out. The difficulty will be to make the "punishment fit the crime." Where does compassion fit in? Was this a major or minor infraction of the rules? Was this a single occurrence in an otherwise unblemished record, or was there a pattern of infractions over a protracted period? What are the legal implications?

In the end, the severity of the punishment and its possible harmful effect on the offender must be guided in part by an assessment of the future harm that might be inflicted on the public should the offender be spared the punishment. To put it more simply, compassion for the offender must be balanced by compassion for the public.

Finally, how much better it would be if we could prevent the unethical behavior in the first place! The danger here is the real possibility that in our eagerness to solve the problem, administrative systems are put into place that would be cumbersome, resented by the faculty, and possibly involve a spy system whereby the accused would not be able to face the accuser. Above all, we must guard against the possibility that the "side effects" of the "preventive medicine" are more debilitating to the system than the "disease" we are trying to prevent or eliminate. △

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and cry from dentists—who were confusing the open nature of a professional advancement with the need for competitive secrecy in the world of business.

There is, however, an area where dentists strongly support business confidentiality—the area of fees and treatments. Dental insurers are huge repositories of facts about dentists and their patients—both individually and collectively. I'm pleased to report that I'm unaware of any substantial breach of this trust by any insurer. But, clearly we must all stay alert to the potential dangers of misuse of professional data, even in the name of research.

The "busyness" problem in dentistry has exacerbated, if not caused, a dentist ethics problem which in turn has caused a problem for the dental insurance industry. I refer to a scheme described as "overbilling." This comes about when a dentist, eager to attract more patients, agrees to accept the insurer's payment as payment in full. Said another way, the dentist agrees to waive any copayments or deductibles. The dentist is able to do this by overbilling the insurer, often at 120% or more of the usual fee for the service. This breach of ethics causes dental insurance rates to skyrocket because one has, in essence, created a 100% pay program, something the program purchaser never intended. These skyrocketing premiums are one reason why many purchasers are now looking to alternate payment systems to hold down rate increases. Most participants in the dental insurance industry are working to eliminate this practice. Dental service corporations' contracts with participating dentists specifically prohibit overbilling, a few state's courts have ruled against it, and the ADA Principles of Ethics and Code of Professional Conduct states.[2]

1-J. REPRESENTATION OF CARE AND FEES.
Dentists shall not represent the care being rendered to their patients or the fees being charged for providing such care in a false or misleading manner.

ADVISORY OPINIONS

1. A dentist who accepts a third party* payment under a copayment plan as payment in full without disclosing to the third party* payer that the patient's payment portion will not be collected, is engaged in overbilling. The essence of this ethical impropriety is deception and misrepresentation; an overbilling dentist makes it appear to the third party* payer that the charge to the patient for services rendered is higher than it actually is.
2. It is unethical for a dentist to increase a fee to a patient solely because the patient has insurance.

*A third party is any party to a dental prepayment contract that may collect premiums, assume financial risks, pay claims, and/or provide administrative services.

During recent years, many dentists have criticized dental insurers for developing financial delivery systems that they accuse of reducing the quality of care. Primarily, the delivery systems being so targeted are capitation and PPOs (as opposed to the traditional fee-for-service plans that pay on the basis of most dentists' usual fees). This issue of relative quality of delivery systems is both emotional and important. One must recognize who decides on which delivery system is chosen—it's neither the insurers nor the dentists. It's the purchasers; the ones who are paying the bill. To help these decision-makers, both dentistry and insurers need to have better information on the quality of care provided under different systems. To date, no independent long-range research has focused on this topic. I commend the American Dental Association for taking action—at their 1987 House of Delegates, they voted to seek outside funding and to proceed with just such an independent study, comparing the quality of treatment *and* health associated with *all* delivery systems, including the traditional insured and private practice systems. The results of this proposed

research should give us the information we need to present to purchasers of dental programs as they make their decisions. It's easy to see which programs cost less. But which deliver the best level of care? Or an adequate level of care for the cost?

It is my strong belief that many "ethical" disagreements come about because one does not make a distinction between ethics and professionalism. The perception is very important—the terms are not synonymous. The very fount of our ethics is titled: "ADA Principles of *Ethics* and Code of *Professional* Conduct." (Emphasis added.) Perhaps the late Harold Hillenbrand said it best, in what I believe was his last public paper: "A principle of ethics is a statement of morality and, by its very nature, should not change substantially from day to day or from generation to generation. It is hard for me, for example, to imagine that the courts or anyone else, would tell the professional that the ethical principle, 'Honesty is the best policy' would now be changed to read that 'Honesty is the best policy on every Tuesday and Friday so that competition will not be impaired.' But it is through the interpretation and implementation of these stable principles of ethics that we define our rapidly changing concept of professionalism. Our own ADA Code of Ethics appropriately states very early on that 'While the basic obligation (the ethical principle) is constant, its fulfillment may vary with the changing needs of a society composed of the human beings that a profession is dedicated to serve.' It is this effort, to make the two terms synonymous (when they are not) that makes our discussions of ethics and professionalism confusing, complicated, and difficult."[3]

Only at great risk does one attempt to expand on the thoughtful reasoning of Dr. Hillenbrand. But, let me try. I believe that an issue of critical importance over the next ten years will be the eventual emergence of the dental delivery system by which most dental care will be provided. The debate and discussions on this topic could proceed in a more orderly and efficient direction—much to the benefit of the public's health—if all parties recognized this subtle difference between ethics and professionalism. Two parties can each be highly ethical—yet disagree strongly on whether a course of action is professional. That is, does a particular course of action being considered meet the changing needs of society? If it does, then the stage is set for a more orderly and beneficial reaction to change.

In closing, I'd like to quote from a recent speech of Dr. Norman Olsen, immediate past president of the American College of Dentists—the organization that is dentistry's primary conscience of ethics and professionalism. He said, "We dentists are cut from the same cloth as our American brothers and sisters. We share both their virtues and their faults, their strengths and their weaknesses. And yet, by reason of our profession, we are asked to subscribe to a higher standard... In short, in a world that seems to have grown more tolerant of cutting ethical corners, we are asked to be more ethical. It isn't easy."[4]

No, it isn't easy. But as we move ahead—and strive to understand each other's problems—each other's views of society's needs—we can—indeed we will—keep dentistry's lofty position in the public trust. We've inherited this responsibility from our predecessors—now it's our duty to continue this level of our profession's prestige and trust. △

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GIES AWARD TO CARL A. LAUGHLIN

Citation Presented by Regent Joseph P. Cappuccio

The William John Gies Award was established by the American College of Dentists in 1939 in order to recognize Fellows of the College for outstanding service in dentistry and its allied fields.

This award personifies professionalism in the finest form and represents the highest honor that the college can confer upon one of its members.

The William John Gies Award for 1988 is being presented this year to a distinguished West Virginia dentist.

Dr. Carl A. Laughlin is to be recognized with the William John Gies Award of the American College of Dentists for outstanding and untiring services to his profession and to the public. Dr. Laughlin is very deserving of this high honor because of the exemplary professional life that he has lived.

As stated in a 1972 citation when Dr. Laughlin was honored by the University of Louisville with a Doctor of Laws Degree, "Your many talents as a scholar, leader and organizer are recognized by all, but your willingness to accept responsibility, often at great personal sacrifice, is a true measure of the type of man you really are".

Carl A. Laughlin completed his pre-dental education at the University of Louisville and the University of Kentucky and received his D.D.S. degree in 1932 at the University of Louisville, School of Dentistry. Following his graduation, he received specialty training in his chosen field of orthodontics. He has practiced the specialty of orthodontics for over forty years.

There is no area of the dental profession in which he has not left his mark.

Carl A. Laughlin

He came from a simple West Virginia background and has risen to the very pinnacle of his profession. This has been accomplished through hard work and love for the profession.

Dr. Laughlin has held numerous positions of leadership and importance in organized dentistry including the President of the American Dental Association, President of the American Association of Dental Examiners, President of the West Virginia Dental Association, President of the West Virginia Society of Orthodontists and President of the West Virginia Board of Dental Examiners.

He is a Past Chairman of the Council on Dental Education of the American Dental Association, Past Trustee of the American Fund for Dental Health, and Past Trustee Sixth District of the American Dental Association. History will demonstrate that he was one of the most effective and able Presidents of the American Dental Association.

He has served in many capacities in addition to these offices of responsibility which have contributed much to the high standards of the profession today.

A Fellow of the College, he has been Chairman of the West Virginia Section of the College. Throughout his professional life, he has taken time to support his community, playing an active role in the projects of the St. Mary's Kiwanis Club, the Pleasants County March of Dimes, the P.T.A. of the Eisenhower School in Upper St. Clair, Pennsylvania, and the United Presbyterian Church. He was appointed by the Governor of West Virginia to the Commission to survey the West Virginia Highways.

Dr. Laughlin was the Chief of Dental Services, Station Hospital, European Theater from 1942 to 1945. He currently holds the rank of Retired Reserve Colonel.

Dr. Laughlin is the recipient of numerous honors and awards. These include Omicron Kappa Upsilon; Honorary Doctor of Laws, University of Louisville; Thomas B. Hinman Medallion; Distinguished Alumnus Award of the University of Louisville, School of Dentistry; as well as the Distinguished West Virginia Award from the Governor of West Virginia.

His biographical and curriculum vitae speaks for itself. He has done everything that a man can do in his profession, always with a sense of dedication and excellence.

He has been a very dedicated and devoted family man. He is the proud father of six sons. Four of his sons are also professional men and very highly respected in their chosen fields. Dr. Laughlin has been blessed with a very beautiful and wonderful wife, Karen. They are the proud parents of two young sons, Adam and Travis Laughlin, age 17 and 14.

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AWARD OF MERIT TO E. B. TARRSON

Citation Presented by Treasurer Robert C. Coker

The supporting services of dentistry are universally recognized as being very important to the mission of the professional. From them derive many of the elements that enhance the effectiveness of dentistry for the delivery of care and the management of its own affairs. The Award of Merit of the American College of Dentists was established by the Board of Regents in February 1959 in order to recognize unusual contributions in dentistry and its services to humanity by persons who work with the profession in common purpose but are not Fellows of the College.

Mr. E. B. Tarrson has been selected for the Award of Merit for 1988. Mr. Tarrson is Chairman of the Board of John O. Butler Company, one of the foremost producers of preventive dentistry products in the world which has corporate offices in Chicago and two other offices abroad and is represented in fifty-eight countries.

Mr. Tarrson was born and educated in Chicago, Illinois. He attended Lewis Institute of Illinois and the University of Illinois before being employed in his father's company. He joined the John O. Butler Company in 1949. He held various positions in the organization and eventually rose to the Presidency of the company in 1965. He developed a company with a Professional Service Arm and a Research Arm known as the Butler-Tarrson Dental Research Foundation. During his ten years as Chief

E. B. "Bud" Tarrson

Executive Officer of the John O. Butler Company, he has demonstrated time and time again his philanthropy and total commitment to dentistry. His company has made many Educational Research Grants to various groups and dental schools. He is responsible for establishing three Student Fellowships-A.A.D.R. grants. Sizeable contributions of toothbrushes have been made to the World Health Organization on various occasions and his company has been involved over the years in many charities including the March of Dimes, Kiwanis International and Project Hope. He has contributed to the American Fund for Dental Health and the American Association of Periodontics. The Preventive Dentistry Room of the Pediatric Dentistry Clinic of the University of Southern California, School of Dentistry, was established by his company. He serves as a Trustee Advisor of the American Fund for Dental Health. He had reprinted and bound a rare collection of papers by an outstanding researcher (C. C. Bass) in preventive dentistry for the purpose of placing them in the libraries and departments of periodontics of all U.S. and Canadian dental schools.

In demonstration of his commitment to the dental profession, a financial contribution was made to the Dental Pavillion at the World's Fair in Knoxville, Tennessee in 1982. Mr. Tarrson is also responsible for the establishment of a Fellowship named in honor of the late Harry Bruce, former Executive Director of the American Association of Dental Schools. He sponsors the Gold Medal Award of the American Association of Periodontics, and just recently he helped sponsor the first Regional Leadership Conference of the American College of Dentists held in West Virginia.

Businessman, manager, philanthropist, dedicated leader, Mr. E. B. Tarrson has served the dental profession as a loyal member of the dental team. The profession recognizes and appreciates Mr. Tarrson's dedication and commitment to the total health care of the American people.

Mr. President, it is a pleasure and an honor for me to present Mr. E. B. Tarrson to you for the Award of Merit. △

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The Laughlins are a very proud and distinguished family. They represent the American dream. His life has been one of the great success stories of our profession, and it has set an example for younger men of the profession to emulate.

Dr. Laughlin has given a lifetime of total dedication and service to his profession, country and nation.

Mr. President, it is a distinct pleasure and honor for me to present a friend and cherished colleague, Dr. Carl A. Laughlin, for the William John Gies Award of the Amerian College of Dentists. △

"SALUTE" OF THE COLLEGE TO CLIFTON O. DUMMETT

Citation Presented by Editor Keith P. Blair

Every so often the College takes the time to salute a Fellow of the College for a special task well-done. Such is the situation this year for Dr. Clifton O. Dummett to receive our recognition.

He is a native of Georgetown, Guyana, South America, which accounts for his rich, very proper and distinguished-speaking style. Dr. Dummett came to the United States in 1936 when he was 17 and entered Howard University in Washington, DC. He later received his Doctor of Dental Surgery Degree and Master of Science in Dentistry Degree at Northwestern University, followed by a Master in Public Health Degree from the University of Michigan.

He joined the faculty of Meharry Medical College School of Dentistry in Nashville, Tennessee, where he taught Oral Pathology, Endodontics, Periodontics, Oral Medicine, Preventive Dentistry and Dental Public Health. In 1947, at the age of 28, he was designated Dean and Director of Dental Education at Meharry, becoming the youngest dental dean in the United States. During his stay at Meharry, he brought the school into full approval by the ADA Council on Dental Education and established a Meharry chapter of the National Honor Society, Omicron Kappa Upsilon.

Dr. Dummett then became Chief of Dental Service for the Veteran's Administration Hospital at Tuskegee, Alabama, where he established approved residency programs in periodontology and oral surgery, and a rotating internship program. During his military service, he became Chief of Periodontics and Consultant in Periodontics to the Alaskan Air Command when stationed at the Elmendorf Air Force Base at Anchorage. He is a Diplomate of both the American Board of Periodontics and the American Board of Oral Medicine.

Clifton O. Dummett

Dr. Dummett holds memberships in numerous organizations, including Sigma Pi Phi, Alpha Phi Alpha, Delta Omega, International Association for Dental Research, American Academy of Dental Medicine, and the American Association of Dental Editors. He is also a Fellow of the American Public Health Association, the International College of Dentists, the American Association for the Advancement of Science and the Academy of Dentistry International. His honors include Omicron Kappa Upsilon, Sigma Xi, the 1952 Award of the National Dental Association, and the Distinguished Service Award of the American Association of Dental Editors.

He is a former president of the American Association of Dental Editors and for 22 years he served as editor for the National Dental Association. He has been President of the International Association of Dental Research, Chairman of the Dentistry Section of the American Association for the Advancement of Science, President of the Los Angeles Dental Society and president of the American Academy of the History of Dentistry.

At the request of the Office of Economic Opportunity in 1966, he was selected as the Dental Director of the University of Southern California School of Medicine's Watts Health Services Center. In 1968 he became the Health Center Director, the first dentist in the country to do so. At the University of Southern California, he was appointed professor of dentistry and soon initiated the USC Section of Community Dentistry, which he still serves as Chairman.

But for all his accomplishments in dentistry, we are primarily recognizing Dr. Dummett today for his considerable abilities as a qualified dental historian and excellent writer. More specifically, the American College of Dentists, in 1983, invited Dr. Dummett to write a biography of Dr. Harold Hillenbrand, the illustrious former ADA Executive Director, with particular emphasis on the development of organized dentistry in the United States, *as remembered by Dr. Hillenbrand.* Dr. Dummett accepted the appointment on two conditions: That he would have a free hand to organize and to write the history and that he would be paid only for out-of-pocket expenses.

Dr. Dummett and his wife, Lois took on the task with enthusiasm and, in 1986, completed the book entitled "The Hillenbrand Era: The Glanzperiode (which is German for Brilliant Period) of Organized Den-

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HONORARY FELLOWSHIP TO DR. LOIS K. COHEN

Citation Presented By Regent Thomas W. Slack

Dr. Lois K. Cohen is Assistant Director for International Health and Chief of the Office of Planning, Evaluation and Communications at the National Institute of Dental Research, National Institutes of Health, Department of Health and Human Services.

After receiving her B.A. Degree with honors in Sociology at the University of Pennsylvania, Dr. Cohen continued her education at Purdue University where she earned an M.S. and a Ph.D. in Sociology. Having had visiting academic appointments at both Howard and Harvard Universities, she has been with the U.S. Public Health Service for most of her 24 year career both as a research sociologist and currently as a health science administrator. She has published numerous papers and classic reference books on the social sciences as they relate to dentistry and to the public's oral health.

Lois K. Cohen

She co-directed the World Health Organization's International Collaborative Study of Dental Manpower Systems in Relation to Oral Health Status. An unparalleled study in ten industrialized nations, it compared data gathered on oral health status with data gathered on behavioral, socio-cultural and economic aspects of populations for the purpose of assessing determinants of oral health outcomes. She is now deeply involved in the follow-up study which includes middle-income developing countries as well as industrialized countries.

Dr. Cohen was the first recipient of the Distinguished Senior Scientist Award of the International Association for Dental Research, given by the Behavioral Science Group and the Johnson and Johnson Company. She was recently honored as the 1988 Percy T. Phillips Visiting Professor at Columbia University, School of Dental and Oral Surgery, a jointly sponsored professorship of Columbia University and the Dental Society of the State of New York. In May of this year she was honored by the U.S. Public Health Service with a Superior Performance Award for sustaining national leadership in international oral health. Currently, she is a consultant to the American Dental Association on its role in global oral health. Active in the Federation Dentaire Internationale for about 20 years, Dr. Cohen serves as a member of the Scientific Programme Committee and chairs the Working Group on Oral Health Promotion.

Mr. President, it is an honor for me to present Dr. Lois K. Cohen to you for Honorary Fellowship in the American College of Dentists. △

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tistry." This publication is a documentation of the development of organized dentistry in the United States, as well as a summary of Dr. Hillenbrand's contribution to that development period. In sixteen episodes, Dr. Dummett presented American Dentistry's growth during the forty year period from 1930 to 1970. During these years, a general appreciation evolved for dentistry as an important health service. Harold Hillenbrand contributed in great measure to this while serving as General Secretary and Executive Director of the American Dental Association from 1946 to 1969.

Therefore Dr. Dummett, the College *Salutes* you for the success of this project and for the outstanding contributions you have made to the literature, which was in response to the challenge given to you by the Board of Regents of the College just a short time ago.

Mr. President, it is a *privilege* for me to present Dr. Clifton O. Dummett to you to receive the *Salute of the College.* △

CAMPAIGN FOR THE 90's

President-Elect's Address

James A. Harrell, Sr.

Today is a great day! We have all been looking forward to today for some time! For you new Fellows, I hope this will be one of the more important and joyful days in your life. I am sure that this new relationship will inspire you to even greater accomplishments!

Einstein once said, "Let us not strive to be a success, but rather let us strive to be people of value." That is what the American College of Dentists is all about!

Sir Winston Churchill used to love to tell the story about a Texan who brought his horse to the famous horse race in England, the Ascot Race. The Duke of Marlboro, who was the steward of the race, went down to the stables to check the horses. As he walked through to the stables, he passed the Texan and noticed him feeding some white tablets to his horse. The Duke said "You can't do that in this country, it is against the law." Whereupon the Texan replied: "Oh, it is nothing but sugar." He put one in his mouth, chewed it up, and swallowed it. "Here, try one yourself." The Duke tasted it and it was sweet, so he chewed it up and swallowed it also, and went on his way, satisfied it was all right. Later as they lead the horses out to the gate the Texan told his jockey, "You be sure you keep this horse on the outside because there is no one that can catch him but me and the Duke of Marlboro." Then Churchill always said: "Appearances are deceptive — not all runners in a race are genuine." However, we know all of our Fellows are genuine and they are people of value!

The College has reached new heights and dimensions. Section activities have increased greatly and are dynamic in many areas. Nominations for Fellowship are at an all time high. The Journal was

James A. Harrell, Sr.

upgraded and expanded recently to include refereed scientific articles. Participation in the Annual Meeting and Convocation by Fellows reached a new milestone last year.

The College's national prominence was demonstrated recently when, in collaboration with the American Dental Association and the American Association of Dental Schools, the guidelines for teaching professionalism and ethics in dental schools were established. This was initiated and funded by the College and is an excellent example of what the College's resources can accomplish.

Today the American College of Dentists is kicking off the very first Capital Fund Drive it has ever held — it is being called the CAMPAIGN FOR THE 90'S.

This October 7th, 1988 becomes a special day in the history of the College because it is the day we commit ourselves to shaping the future for the next 20 to 50 years!

WHY HAS THE COLLEGE LAUNCHED THIS CAMPAIGN?

The CAMPAIGN FOR THE 90'S for the American College of Dentists Foundation will provide a permanency for its facilities that will make possible many programs and activities now limited by lease arrangements.

The opportunity for the College to give its full attention to the objectives, as spelled out in the Bylaws, is possible through this campaign. A Center for Scholarship in Ethics and Professionalism in Dentistry can be established. A Center for the History of Dentistry in America can be initiated that can cross all disciplines. A Conference Center for Scholarly Library Research and Study in Dentistry can be set up that can serve the profession at large. A national headquarters facility for the College and the Foundation can be developed that can serve as a place to visit and work as well as to provide administrative support for the activities of the College and the Foundation. Of most significance, conference facilities and meeting rooms for Fellows will be available, as well as a College historical records section, an awards recognition area and a dental history display. This would provide honor to those who have shaped the profession and those who have given the profession of dentistry its present high standing.

The CAMPAIGN FOR THE 90'S will also provide an endowment to support some of the new programs. This, together with the volunteer help of the Fellows of the College, can provide some of the most dynamic programs the College has ever seen.

The CAMPAIGN FOR THE 90'S will also solve a major problem that the College and Foundation now face — lack of space. With the College growing and programs developing, the College has grown out of its facilities and documents of significant importance to our activi-

ties have been stacked away out of reach of reference committees or Regents' Review. Additionally, the meaning of the awards presented by the College to recognize significant achievement in dentistry are hidden. These can be displayed in a scholarly and collegial environment for all Fellows to enjoy.

KEY TO SUCCESS

The measure of interest and enthusiasm for the College will be demonstrated by this fund drive for the Foundation. Fellows will wish to volunteer at all levels to give of themselves and of their resources in order to respond to the invitation to support the CAMPAIGN FOR THE 90'S. Four Honorary Chairmen have been named. These distinguished Fellows have given their all to the College in years past and are willing to continue the task. These four Honorary Chairmen include among them one who conceived and founded the American College of Dentists Foundation 15 years ago and has supported it every year since.

CAMPAIGN FOR THE 90's is a $750,000 effort in which all Fellows will have an opportunity to participate this year. Many opportunities will be made available to those wanting to honor relatives and friends or themselves.

Gifts of $10,000 and above will be needed to meet the goal. Our basic request will be for $1,000 a year or a $3,000 pledge over 3 to 5 years. We will need many of these! Of course, gifts of all amounts will be welcomed. Permanent plaques in the foyer and other appropriate recognition will be given to donors. A minimum gift of $1,000 over three years is only $6.24 a week. Would you contribute $6.24 a week to the College Foundation in order to provide a headquarters that has stability and dignity and represents your College as a Center for Ethics and Professionalism?

HOW IS THE CAMPAIGN ORGANIZED?

The Campaign is organized into two phases. The first phase involves the Steering Committee, Honorary Chairmen and Board of Regents of the College. This committed group has already pledged!! To date these, plus other early pledges, total over $150,000, and we have just started the Campaign today!

The second phase will be the general solicitation plan. This will be done by the Teleconnect Company which will contact every Fellow of the College. This will take place in November and December. Every Fellow will receive a letter together with a brochure that describes the objectives of the Campaign and the opportunities made possible by significant gifts. Be on the look out for this letter and also be ready for the telephone call!

The time is now to move forward!! I would like to ask each one of you today to start spreading the news of this Campaign for the 90s, and sharing our enthusiasm for a new home of the College. I recently read the quote from Sir Edward V. Appleton, the Scottish scientist, whose scientific discoveries made possible worldwide broadcasting and won him a Nobel Prize! When he was asked for the secret of his amazing achievements, he replied, "It was enthusiasm!! I rate enthusiasm even above professional skill, for without enthusiasm one would scarcely be willing to endure the self-discipline and endless toil so necessary in developing professional skill. Enthusiasm is a dynamic motivator that keeps one persistently working towards his goal."

In closing, I want to share with you a true story about a little old lady in my home town, 80 years old, who still has her vision, spunk and enthusiasm!

There was an automobile wreck in my town and the man at fault hired a young lawyer just starting his practice to defend him. The only witness to the accident was this little old lady. When the trial started, the lawyer had nothing to defend him with, however he noticed the witness was wearing glasses and he thought if he could disqualify her on her sight, he might have a chance. He put her on the witness stand and said, "I notice you are wearing glasses, did you have them on at the time of the accident?" She said, "Yes." He said, "How long has it been since you had your eyes examined?" She said, "just three weeks before the accident." Well, he did not know what to say next. Finally, he said, "Can you see the clock at the rear of the courtroom wall?" She said, "Yes." "What time is it?" "Fourteen after three." He was stumped again. He said, "Just how far can you see?" And she said, "Well, I can see the moon, how far is that?"

Now this is the type of imagination and enthusiasm we need as we go into the CAMPAIGN FOR THE 90'S for the American College of Dentists. It is time for each of us to recognize why we were nominated for Fellowship in the College and to dedicate ourselves to the future of the College for excellence, and as stated in the Preamble to the By-laws of the College "to promote the highest ideals, develop good human relations and understanding and extend the benefits of good dental health to all!" △

REGENT GEORGE O'GRADY DIES

George Losene O'Grady, Regent for Regency I of the American College of Dentists, a retired Army Colonel and former Assistant Dean at Columbia University School of Dental and Oral Surgery, died November 3rd at the Atlantic City Medical Center in Pomona, N.J., after an extended illness.

Dr. O'Grady joined the Board of Regents in 1986 and served on the Constitution and Bylaws Committee, the Conduct Committee, the Ad Hoc Committee on Ethics, and the Commission on Research. He was very active in the New York Section having served as Secretary-Treasurer, Vice Chairman, Chairman, and Chairman of the Executive Committee.

Although a native of New York City, his residence was in New Gretna, New Jersey. He graduated from Fordham University in New York in 1939, receiving an A.B. Degree. He entered Columbia University in 1930, graduating with the D.D.S. Degree in 1934. He then entered private practice in Manhattan in 1934 and continued until 1940 when he entered military service. He also was attending Oral Surgeon at the Bronx Eye and Ear Hospital from 1938 to 1940 and Assistant Professor of Oral Surgery, New York Medical College and Flowers Fifth Avenue Hospital from 1939 to 1940. Between 1934 and 1938 he served as Assistant Attending Clinician at St. Vincents Hospital and Harlem Eye and Ear Hospital.

George L. O'Grady

While in the Army Dental Corps he served in the European Theatre during World War II, and became the Assistant Chief for Personnel in the Office of the Surgeon General, General of the Army, Washington, D.C. He held positions as Oral Surgeon, U.S. Military Academy, West Point, Post Dental Surgeon at Fort Lewis, Washington, and Fort Monmouth, New Jersey before retiring in 1963. He then joined the faculty at Columbia University School of Dental and Oral Surgery as Assistant Dean and Professor of Dentistry and Director of Auxiliary Utilization Program, a position he held until 1973 when he was appointed Adjunct Professor of Dentistry, retiring a second time in 1974. He also was Attending Surgeon at Presbyterian Medical Center from 1969 to 1973.

In addition to being active in the New York Section of the American College of Dentists, George was active with the New York Society of the State of New York, the First District Dental Society, the American Association of Dental Schools and the Southern Dental Society of New Jersey. He was a Fellow of the New York Academy of Dentists, the International College of Dentists and served as Secretary of the William J. Gies Foundation for the Advancement of Dentistry, Inc.

Survivors include three daughters, Leona of New Gretna, Helen of New York City and Maureen of Marietta, Georgia; a son, George, Jr. of Bedford, Texas; a sister, Leona Hanlon of Queens; twelve grandchildren and three great-grandchildren.

George had many talents. In addition to being a clinician, educator, administrator and family man, he was an excellent pianist. Those who knew him will remember many hours gathered around the piano as George played those familiar melodies from musicals, light opera and songs to remember. However, his quiet manner and determination was of great importance to the Board of Regents and his thorough review of Section activities was of great help to Sections in Regency I during his abbreviated term as Regent of the College.

George will be missed by all. △

NEW FELLOWSHIPS CONFERRED

Fellowships in the American College of Dentists were conferred upon the following dentists at the Annual Convocation in Washington, D.C. on October 7, 1988.

FRED B. ABBOTT
Salisbury, Maryland

GERALD D. ABRAHAM
Thiensville, Wisconsin

FREDERICK G. ADAMS
Hartford, Connecticut

JACK ADAMS
Cleveland, Tennessee

MARTIN M. ADAMS
Flemington, New Jersey

EDGAR C. ALDREDGE
Marlin, Texas

WILLIAM HODGKIN ALLISON
Warrenton, Virginia

EDWARD ANKER
Riverhead, New York

DONALD E. ANTONSON
Gainesville, Florida

GARY R. ARBUCKLE
Arlington, Virginia

GARY C. ARMITAGE
San Antonio, Texas

DAVID R. AVERY
Indianapolis, Indiana

RICHARD D. BARNES
Hampton, Virginia

JANET G. BAUER
Los Angeles, California

CARL V. BECHERER
Wauwatosa, Wisconsin

BURTON E. BECKER
Tucson, Arizona

HARRY J. BECKNER
Victorville, California

ROLF G. BEHRENTS
Memphis, Tennessee

DAVID E. BELLER
New York, New York

KEITH L. BENTLEY
North Wilkesboro, North Carolina

RAY D. BERRINGER
Honolulu, Hawaii

PERRY J. BINGHAM
Santa Rosa, California

THOMAS H. BIRNEY
Orange, California

WALTER E. BISCH
Florissant, Missouri

JORGEN BJORNVAD
Copenhagen, Denmark

FRANK C. BLAIR, JR.
Long Beach, California

PHILIP LEONARD BLOCK
Baltimore, Maryland

PHILIP LLOYD BLOCK
Niceville, Florida

ROGER H. BOLTZ
Windsor, Colorado

HERBERT H. BONNIE
Norfolk, Virginia

DORLINE H. BOSBOOM
New York, New York

RICHARD M. BOWLES
Knoxville, Tennessee

JOSEPH J. BOX
Pawtucket, Rhode Island

EUGENE W. BROCK
Wichita Falls, Texas

BENJAMIN W. BROWN
Raleigh, North Carolina

WALLACE EDWARD BRUNSON, JR.
Baytown, Texas

JOHN J. BURDITT
Kerrville, Texas

JAMES C. BURNS
Richmond, Virginia

OLOF G. CARLSON
Stockholm, Sweden

ROBERT BRUCE CARNEY, JR.
Jackson, Tennessee

HERBERT A. CARPENTER
Grand Rapids, Michigan

KARL E. CARSON
Fort Collins, Colorado

CHARLES H. CASEY
Houston, Texas

FRANCIS J. CERAVOLO
Pittsburgh, Pennsylvania

FREDDY R. CESSAC
Pearland, Texas

ALLAN H. CETRON
Cherry Hill, New Jersey

DOUGLAS V. CHAYTOR
Halifax, Nova Scotia

KENNETH L. CHRISTENSEN
Flagstaff, Arizona

JOSEPH A. CLAYTON
Ann Arbor, Michigan

G. GARY CLENDENIN
Bethesda, Maryland

RAY E. COLCLASURE
Pine Bluff, Arkansas

HARRIS N. COLTON
Woodbury, New Jersey

TOM O. CONLON
Spokane, Washington

CHARLES L. COOLEY
Forest Park, Georgia

STEPHEN B. CORBIN
Bethesda, Maryland

R. WILLIAM CORNELL, JR.
Chicago, Illinois

LEE ALBERT COUNSELL
Carbondale, Illinois

CHAUNCEY CROSS
Springfield, Illinois

JOHN J. CUDDY
APO, New York

WOOD E. CURRENS
Louisville, Kentucky

EVA C. DAHL
La Crosse, Wisconsin

RICHARD M. DANNENBAUM
Northfield, New Jersey

ROY G. DAVIDSON
Birmingham, Alabama

THOMAS R. DAVIES
Costa Mesa, California

CONAN ERSKINE DAVIS, JR.
Mobile, Alabama

ROGER W. DETTRO
Mattoon, Illinois

WILLIAM S. DODSON
Portsmouth, Virginia

I. LEON DOGON
Boston, Massachusetts

JOSEPH M. DOHERTY
Richmond, Virginia

M. FRANKLIN, DOLWICK
Gainesville, Florida

R. BRUCE DONOFF
Boston, Massachusetts

RAY K. DRUM
Gettysburg, Pennsylvania

MANVILLE G. DUNCANSON, JR.
Oklahoma City, Oklahoma

ROBERT W. DURKIN
Redwood City, California

GARY HAROLD DWIGHT
Lansing, Michigan

JACQUELINE DZIERZAK
Chicago, Illinois

ARE CHARLES EDWARDS
Paris, France

JAMES CLYDE ELLIOTT, JR.
Asheville, North Carolina

FRED G. EMMINGS
Rochester, New York

JOHN P. ESSEPIAN
Latham, New York

ROBERT WARD FAITH
Montreal, Quebec

FRANK H. FARRINGTON
Richmond, Virginia

SYLVAN FELDMAN
Pikesville, Maryland

PATRICK J. FERRILLO, JR.
Alton, Illinois

GERALDINE MACKOUL FERRIS
Altamonte Springs, Florida

FREDERICK C. FINZEN
Corte Madera, California

A. PATRICK FLYNN
Washington, D.C.

ROSCOE C. FOSTER
Chicago, Illinois

R. LAWRENCE FRAZE
Warren, New Jersey

WILLIAM GORDON FRICK
Temple, Texas

PETER C. FURNARI
Scarsdale, New York

ROBERT K. GABRIELLE
Valley Cottage, New York

IAN D. GAINSFORD
London, England

WILLIAM L. GALLAGHER
San Francisco, California

ANTHONY W. GARGIULO
Chicago, Illinois

ROBERT DAVIES GARREN
Asheville, North Carolina

FRED A. GARRETT
Houston, Texas

ROBERT S. GARTRELL
San Francisco, California

CORNELIUS T. GEARY
Random Lake, Wisconsin

WILLIAM L. GEE
San Francisco, California

RICHARD E. GEIGER
Cedar Rapids, Iowa

M. JOAN GILLESPIE
Alexandria, Virginia

VORIS WADE GLASPER
Houston, Texas

NEIL M. GLASS
Oklahoma City, Oklahoma

EUGENE A. GLOUDEMAN
Milwaukee, Wisconsin

ALBERT C. GOERIG
Monterey, California

MORTON H. GOLDBERG
West Hartford, Connecticut

MARVIN H. GOLDFOGEL
Denver, Colorado

PRIMO E. GONZALES
Makati, Philippines

THEODORE GORDON
Chicago, Illinois

LIONELL N. GREENBERG
Santa Monica, California

DEBORAH GREENSPAN
San Francisco, California

OSCAR N. GUERRA
Columbia, Missouri

JOHN W. GUINN, III
Martinez, Georgia

EARL W. GUNN, JR.
Atlanta, Georgia

TOFFE M. HADITY
Utica, New York

CARL SHOICHI HAGA
Honolulu, Hawaii

HAROLD L. HAMBURG
Hauppauge, New York

E. M. HAMMON, JR.
Hixson, Tennessee

PETER HANEDOES
Twello, Netherlands

HERBERT L. HANGER
Dubuque, Iowa

TORE LENNART HANSSON
Phoenix, Arizona

JEFFERSON F. HARDIN
Augusta, Georgia

JOHN W. HARGRAVE
Gaithersburg, Maryland

JANET LEEPER HARRISON
Houston, Texas

EDWIN R. HARVEY
Lakewood, California

WILLIAM E. HAWKINS
Phoenix, Arizona

STEVEN K. HEDLUND
Iowa City, Iowa

ROBERT N. HICKS
West Vancouver, British Columbia

JACK HIRSCH
New York, New York

SUMIYA HOBO
Tokyo, Japan

ROY DONALD HOFFMAN, JR.
Pittsburgh, Pennsylvania

RONALD J. HOLZHAUER
Wauwatosa, Wisconsin

DAVID E. HOOVER
Omaha, Nebraska

EDWIN CLAY HORNE
New York, New York

JOHN E. HORTON
Columbus, Ohio

W. KENNETH HORWITZ
Houston, Texas

ERIC J. HOVLAND
Baltimore, Maryland

HOWARD HOWELL
Boston, Massachusetts

ROBERT J. HUBBERT
Tustin, California

JOHN E. HUTTON
New York, New York

L. THOMAS JOHNSON
Glendale, Wisconsin

WILLIAM LOUIS JOHNSON, III
Atlanta, Georgia

W. BENFORD JOHNSON
Tulsa, Oklahoma

JERRY C. JOHNSTON
Ruston, Louisiana

RUSSELL G. JUMBELIC, JR.
Alexandria, Virginia

RICHARD I. KAHN
Los Angeles, California

JOSEPH CLARK KEHOE
Gainesville, Florida

KENNETH CARROLL KENNEDY
Chapel Hill, North Carolina

WILLIAM PHILIP KENNEDY
Hartsville, South Carolina

ATA UR RAHMAN KHAN
Rawalpindi, Pakistan

STEVE E. KILTAU
West Palm Beach, Florida

J. DARWIN KING
Staunton, Virginia

DUSHANKA V. KLEINMAN
Bethesda, Maryland

DONALD WILLIAM KOHN
New Haven, Connecticut

SEYMOUR KOSLOWSKY
Westfield, New Jersey

DAVID H. KRAUSHAAR
Hastings-On-Hudson, New York

RICHARD A. KRAUT
Mamroneck, New York

JOHN C. KRIZER
Oklahoma City, Oklahoma

BENTON KUTLER
Omaha, Nebraska

GREGORY C. LA MORTE
South Orange, New Jersey

FREDERICK T. LAU, II
Phoenix, Arizona

LOUIS J. LA VECCHIA
Arlington, Virginia

RICHARD W. LAWRENCE
Napa, California

LESTER L. LEVIN
Aston, Pennsylvania

NADINE A. LEVINSON
Laguna Niguel, California

LEWIS E. LIPMAN
Englewood, New Jersey

PRESTON A. LITTLETON, JR.
Potomac, Maryland

WEYLAND LUM
San Francisco, California

THAYER C. LYON, JR.
Dallas, Texas

J. BERNARD MACHEN
Chapel Hill, North Carolina

CARL G. MADION
Traverse City, Michigan

GLENN T. MAIHOFER
Whitefish Bay, Wisconsin

H. RICHARD MARSHALL
Lewisburg, West Virginia

JOHN A. MATIS
Ogden, Utah

MICHAEL D. MATZKIN
Waterbury, Connecticut

WILLIAM R. McCUTCHEON
Morgantown, West Virginia

J. PERRY McGINNIS, JR.
Jackson, Mississippi

JAMES CARROLL McGRAW
Bellevue, Washington

CHARLES F. McGUIGGAN
Marshall, Minnesota

J. THOMAS MEADOWS
Jacksonville, North Carolina

FRANK L. MELLANA
New York, New York

MARION EDWARD MILLS
Pasadena, California

SHEPPARD B. MOLLICK
Milwaukee, Wisconsin

JAMES BURTON MONCRIEF
Athens, Georgia

JOHN R. MOON
Schenectady, New York

ROBERT N. MOORE
Lincoln, Nebraska

DENNIS N. MOREA
New York, New York

WARREN M. MORGANSTEIN
Baltimore, Maryland

EDWARD L. MOSBY
Kansas City, Missouri

HOWARD B. MOSHMAN
Brooklyn, New York

JAMES C. MURPHY
Richmond, Kentucky

ROBERT C. MURRAY
Carlsbad, New Mexico

MALCOLM A. NANES
New York, New York

DAVID A. NASH
Lexington, Kentucky

WAYNE M. NEWBY
Sturgeon Bay, Wisconsin

HAROLD W. NIELSEN
Oakland, California

S. EDWIN NOFFEL
Cape Girardeau, Missouri

BENNIE J. NORTON, JR.
Smyrna, Georgia

LOUIS A. NORTON
Farmington, Connecticut

OLEG N. OBUHOFF
Pacifica, California

JAMES GARY OLSON
Damariscotta, Maine

MELVYN N. OPPENHEIM
Scarsdale, New York

RONALD C. PACKARD
Washington, D.C.

JOHN H. PALMER
Washington, D.C.

BRIAN J. PARKINS
London, England

CLARK W. PECK
North Olmsted, Ohio

WALTON STEWART PEERY, JR.
Charlotte, North Carolina

ALFONSO J. PERNA
Binghamton, New York

ROBERT D. PERRY
Crawfordsville, Indiana

DONALD D. PETERS
Fort Belvoir, Virginia

JAMES C. PHERO
Cincinnati, Ohio

RONALD H. PHILLIPS
Lubbock, Texas

THOMAS C. PINK
Jackson, Michigan

T. CARROLL PLAYER, JR.
Florence, South Carolina

NORMAN PLOTKIN
San Francisco, California

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FACTORS INFLUENCING DENTAL CAREER CHOICE

A Survey of Currently-Enrolled Students and Implications for Recruitment

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At a time of declining enrollment dental institutions are looking for ways to recruit well qualified students. It is therefore of interest to know at what stage in their education students select dentistry as a professional career. To determine the factors which influenced a student's decision, a survey was administered to the students currently enrolled at Louisiana State University School of Dentistry (LSUSD) in April, 1988. The survey was designed to ascertain at what age and educational level students considered a dental career, what other careers had been considered, and which individuals had influenced the decision. Questions were also included to assess what other factors had been influential and to determine whether the students now had concerns about dentistry or whether they were still happy with their choice.

A number of studies have addressed the concern of declining applications for, and enrollment in, dental school.[1-8] Factors which influence selection of a career in dentistry and characteristics of dental school applicants have also been explored.[9,10] The 1987/88 Annual Report of the American Dental Association on Dental Education[1] indicates that enrollment to dental schools continues to decline. Solomon and Stoll (1986)[2] reported on the characteristics of the 1986 entering class. The projected number of applicants, 5,700, represented an 8% decline from the previous year. The class was projected to have more females and minorities. The grade point average seemed to have stabilized. Watson et al (1987)[3] support these findings concerning enrollment figures and declining applicants. Queen (1985)[4] also addresses the problem of declining enrollment, specifically for New York but recognizing that the problem requires some new approaches. In particular, he suggested career services, contact with dentists and visits to dental offices for prospective students. Waldman (1985)[5] also suggests a need to encourage young people to consider dentistry as a career for the future, bearing in mind that the future of dentistry itself will be different. As Bodden (1986)[6] recommended, there is a need to encourage qualified individuals to pursue a career in dentistry and to re-establish enthusiasm for the profession. He recommended that dentists should devote time to potential recruits through the SELECT program of the American Dental Association.

Abbott et al (1984)[7] surveyed dental students to determine reasons for choosing a dental career, factors which influenced the decision and other careers considered. The survey was done as part of an overall recruitment plan. Providing a service to others and opportunity for self employment ranked highest as reasons for selecting a career in dentistry. The family dentist, another dentist and a family member were the most important influences on the decision.

Over et al (1984)[8] surveyed dental students in Australia to assess factors related to career choice and differences in expectations of male and female students. Over et al found that students tended to make their career choice towards the end of high school. They also reported that dentists were most likely to influence the decision to select dentistry as a career. Allen (1985)[9] indicates that the career choice for dentistry is often made in high school or college with parents being most likely to have an impact on the choice.

Romberg et al (1984)[10] investigated the influence of having parents who are dentists on the decision for a career in dentistry. They found that dentist parents were more likely to suggest dentistry as a career, recommended it more highly and were ranked as the most influential factor in the career decision. Similarly, Waldman (1985)[11] noted that there had been an increase in the percentage of applicants whose fathers are dentists. Further, there has been an increase in female candidates, a decrease in Caucasian candidates, a decrease in science grade average

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and an increase in student indebtedness.

An area of concern which may influence decisions for a career in dentistry is the increase in student indebtedness. Solomon and Stoll (1986)[12] indicate that student debt appears to be leveling off. However, obtaining financial assistance and the high cost of education may be factors which impact on the student deciding on dentistry. The cost of education may make entry into private practice more difficult. The impact this may have on the profession was addressed in a letter by Potts (1986)[13]. He writes, "Dental education is in the process of producing a class of indentured servants with little choice about their futures."

Given the concerns expressed in the literature, and the continuing fact of declining enrollment it was felt that it would be beneficial to find out more about how the present students decided on dentistry as a career. This information would be useful for recruitment purposes to address important issues and concerns potential students might have. As has been well documented, the dental schools are now in the position of recruiting students and of making the profession and dental education an attractive option.

Methods

In order to determine factors which influenced Louisiana State University School of Dentistry students to embark on a career in dentistry a survey was developed by the authors. The questions were designed based on information obtained from the related literature and on topics of concern for the school. The survey topics included age and educational level at which students first considered and then decided on a dental career, other career choices considered and individuals who had influenced the decision. Questions were also included to assess other influencing factors, to determine whether the students had any major concerns about dentistry and whether they were still happy about their choice. The open-ended format was used for a number of the items to allow for flexibility in responding. The authors wanted to obtain a variety of responses as well as to determine the frequency of some of the more prevalent and anticipated responses. In addition, demographic data such as age, sex and class standing were also collected. The survey was reviewed by several dental educators for appropriateness of the content and for clarity of the items.

The survey was administered to all currently enrolled students (n=194) at Louisiana State University School of Dentistry in April, 1988. A total of 188 surveys were completed of which 50 were seniors, 44 juniors, 47 sophomores, and 47 freshmen. The response rate represents 97% of the total student population.

The data from the open-ended questions were compiled and summarized. Occasional comments were considered to be inappropriate and were not included in the data compilation. Frequency distributions were tabulated for the other categories and descriptive statistics computed where appropriate. Cross tabulation and chi-square analyses were used to compare the demographic characteristics with some of the category variables.

Results

Of the 188 students who completed the survey, 151 were males and 37 females. The females represented 20% of the classes which is somewhat lower than the 29% reported for the total of enrolled students listed in the 1987/88 Annual Report on Dental Education.[1]

The results of the items are reported for the group as a whole rather than for individual classes. The differences among the classes might be due to random variation and, therefore, the data for the classes were combined.

More than 60% of the students (117/188) first considered dentistry as a career prior to leaving high school. The range was from first grade to after college, with the two most frequently indicated grade levels being senior in high school and sophomore year of college. The age range was from 6 years to 30 years, with the most frequently indicated age being 17 and the average being 17.1 (S.D.=4.5).

More than 30% of the students (59/188) actually decided on dentistry prior to leaving high school. The range was from third grade to after college, with sophomore and junior year of college being indicated most often. The age range was from 8 years to 31 years with 21 being most frequently indicated and the average being 19.6 (S.D.=

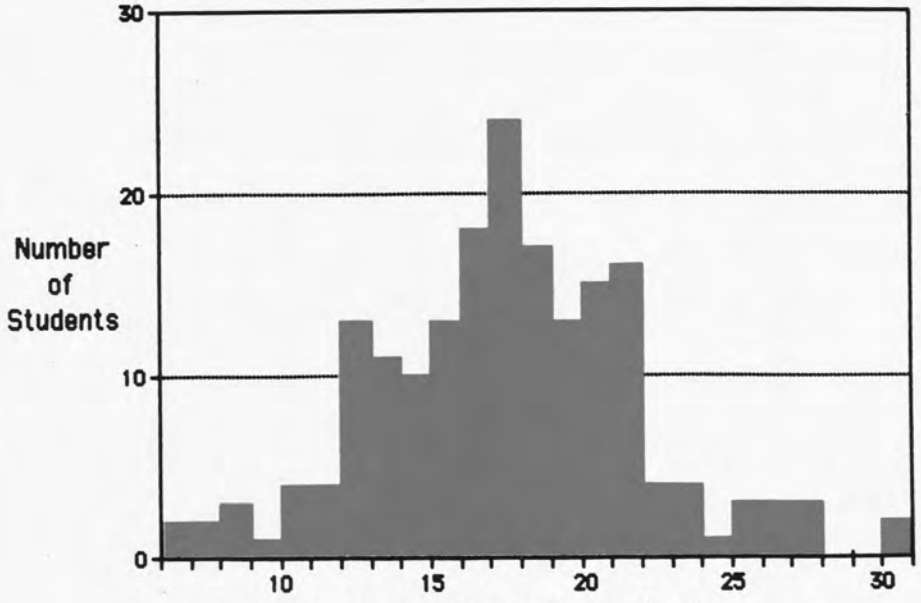

Figure 1. Age dental career was first considered

Table 1. Alternative careers considered

	Frequency*
Medicine	80
Medically related fields	41
Engineering	19
Aviation	14
Law	12
Teaching	11
Architecture	10
Business	7
Psychology	4
Computer analyst	3
Geologist	3

*More than one alternative career may have been listed by an individual.

3.5). Twenty-two students (12%) made the decision to pursue dentistry after college or other work experience. Overall, the data for grade level of actual decision showed less variability than that for the grade level at which a dental career was first considered (Figures 1 and 2).

The question regarding alternative careers was open-ended. The number of times a given career was indicated was tabulated. The most frequently listed alternative career choice was medicine. Medically related fields such as nursing, pharmacy, veterinary medicine and medical technology were grouped together and were the second most reported career alternatives. Engineering, aviation, law, teaching, and architecture followed (Table 1). A variety of other careers from fores-

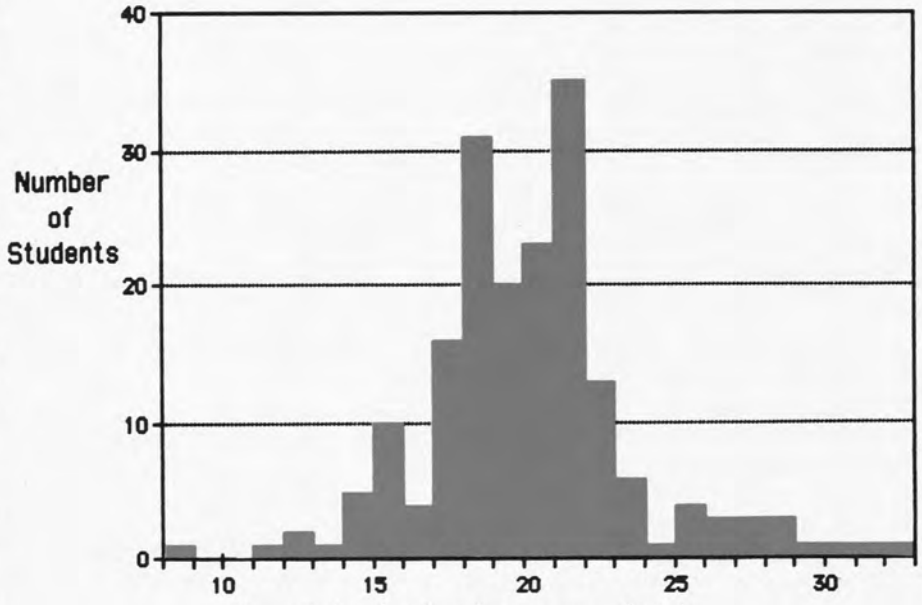

Figure 2. Age that dental career was selected

try to astronomy to plumbing were mentioned once. The open-ended format allowed for an unusual variety of responses, however the most prevalent responses did not differ greatly from those reported in previous research.

The next section of the questionnaire concerned the individuals who had influenced the career decision. The individual most frequently reported was the family dentist (91), followed by the student's parents (83). When asked who was the most important influence the student's family dentist was indicated most often (33) (Table 2). Eighteen students indicated that their dentist father was the most important influence.

The students were also asked to indicate which factors related to the career of dentistry had influenced their decision. The most frequently listed factors were autonomy of self-employment, opportunity to work with people, and financial rewards. When asked for the most important factor autonomy was indicated most often, followed by working with people and flexible work time (Table 3).

Table 2. Individuals considered most important influence on career decision

	Frequency
Family dentist	33
Parents (both)	31
Father	28
Friend	22
Dentist father	18
Self	13

Table 3. Most important factors influencing career decision

	Total	Males	Females
Autonomy of self-employment	61	54	9
Working with people	41	30	11
Flexible work schedule	22	14	8
Financial rewards	20	19	1
Opportunity to work with hands	13	10	3
Prestige associated with profession	13	12	1

The most important influences were also analyzed by male and female groups. The males indicated autonomy most frequently, followed by working with people and financial rewards. The females selected working with people most frequently followed by autonomy and flexible work time.

The questionnaire addressed the concerns that students may have had about dentistry as a career. Thirty-three students expressed concern about the expense either of dental education or of setting up practice. The next most frequently mentioned concern was the risk of infection including AIDS. Other concerns cited included the number of dentists, difficulty of dental school, and professional stress. When asked to specify the most important concern expense was indicated by the largest number of students with the risk of AIDS and infection being second.

The last item was a rating scale on which the students were asked to indicate whether they were still happy with their choice of dentistry as a career. The five point scale ranged from very happy to very unhappy. Responses were coded with 1 representing very happy and 5 very unhappy. The freshman average was 1.57 (S.D.=0.77), sophomore 1.66 (S.D.=1.03), junior 1.53 (S.D.=0.67) and senior 1.78 (S.D.= 0.92). Chi square analysis was used to compare the ratings on the happiness scale between the males and females and among the four classes. The results are reported in Tables 4 and 5. For the male-female comparison, $\chi^2=196.04$, df = 4, $p < .01$ which indicates a significant difference. The males expressed a higher level of satisfaction than the females. For the class comparison, $\chi^2=199.65$, df = 12, $p < .01$ which is significant. A higher percentage of juniors were very happy as compared with seniors.

Discussion

The results of the survey of dental students at LSUSD are consistent with the findings of other studies which addressed similar questions. The results are discussed in terms of their implications for the recruitment of dental students.

Although there was considerable variation, the students in general began to consider dentistry as a career in the last two years of high school and made the decision in the

Table 4. Satisfaction with career choice by class

	Fresh	Soph	Junior	Senior	Total
Very happy	25	28	25	21	99
Happy	19	12	15	23	69
Neutral	2	4	4	4	14
Unhappy	0	1	0	0	1
Very unhappy	1	2	0	2	5
Totals	47	47	44	50	188

first two years of college. This suggests that for recruitment purposes high schools should be targeted with information about dentistry, although it is necessary to be visible in the colleges also. A number of individuals decided to study dentistry after college or pursuing another career. It may be difficult to reach such individuals, but focusing on graduate science programs may be productive. The trend appears to be towards classes including a greater percentage of older students.

The most important individual who influenced the career choice was the family dentist. As Queen (1985)[4] suggests, it is important to get dental practitioners involved in recruiting so that students who are interested can visit dental offices to get direct experience of dentistry. Efforts are being made in this regard with the SELECT program of the American Dental Association[6], and with some individual dental schools. As reported in other studies, parents are an important influence on the career choice of their children. In spite of some recent negative publicity about the profession, dentist fathers in this study were reported as positively influencing the career decision. In view of the fact that more women are entering the profession, dentist mothers may prove to be an important influence in the future. Several students specified that friends who were dental students had been an important influence, which suggests that dental students should be encouraged to participate in recruitment efforts. Although an informal network already seems to exist, an organized procedure to increase contact of prospective students with currently enrolled students may be beneficial.

It is important to get dental practitioners involved in recruiting so that students who are interested can visit dental offices to get direct experience of dentistry.

The autonomy of self employment remains the aspect of dentistry which is the most attractive. As the profession moves to more group practice and individual practices become more difficult to establish and maintain, those who are attracted by this characteristic may be diappointed. It is interesting to note some differences in the influential factors between males and females. Females, somewhat more than the males, are influenced by working with people and the flexible work hours. The males were more impressed by the financial rewards. These important influential factors suggest areas which must be addressed with prospective students during recruitment.

Table 5. Satisfaction with career choice by gender

	Males	Females	Total
Very happy	86	13	99
Happy	51	18	69
Neutral	9	5	14
Unhappy	1	0	1
Very Unhappy	4	1	5
Totals	151	37	188

The autonomy of self employment remains the aspect of dentistry which is the most attractive.

The concerns which students expressed reflect current conditions and possible changes in the nature of the dental profession. Financial considerations both for school tuition and starting a dental practice were the greatest concern. Certainly this is realistic and recruiters must be able to inform students of ways of financing dental education through grants and loans. Another area of concern frequently mentioned was the risk of infectious diseases with AIDS being specifically cited. The impact that AIDS may have on an individual deciding about a health professional career is unclear at this time.

The majority of students were either very happy or happy with dentistry as their career choice. The junior year is perceived by students at LSUSD as the one with the most clinical requirements, and it was therefore expected that they might be less happy than the other classes. However, the least happy group was the seniors who might have been expected to be happy at the prospect of their imminent graduation. The explanation for this unexpected finding may be that board examinations were impending, and students were having anxieties about life after dental school. That females were less happy than males was also an unexpected finding. Further research is needed to determine a reason for this difference.

Conclusion

The findings of this study largely substantiated the results of other related research. Recruitment efforts need to be directed not only at the college level, but at high school or even elementary school grades. Practicing dentists are still the most important individuals in influencing a decision for a dental career. If recruitment efforts are to be successful, enthusiastic practitioners must encourage potential students.

Practicing dentists are still the most important individuals in influencing a decision for a dental career.

Currently enrolled dental students are also an important resource. Potential recruits can better identify with them because of the proximity in age. The concerns expressed by the students surveyed in this study were valid concerns and future recruiters must be prepared to answer some of the questions raised. Unless the trend of declining enrollment is reversed, the worst predictions of dental manpower shortage will become a reality. △

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MINORITY GROUP DENTAL STUDENTS IN A PERIOD OF DECREASING ENROLLMENT

H. Barry Waldman*

A review of applicants, admissions and the rates of attrition during the 1980s for the various racial and ethnic group dental students is reported. As compared to the 1970s, except for blacks, the number of minority applicants accepted to dental schools has increased, and there has been a decrease in the rates of attrition during the dental school course of training.

> "Despite efforts to retain minority group students in schools of dentistry, large numbers of these students fail to complete the course of training."[1]

The rate of attrition of minority group dental students during the 1970s (a time of general increasing enrollment in schools of dentistry) was reviewed in an earlier presentation.[1] During that period:

1. the general rate of attrition for minorities (except Asian Americans) often was two or three times or more than the rate of attrition of non-minority students,
2. the rate of attrition for Black Americans generally was greater than the rate of attrition for other minority groups.[1]

However, dental school entering classes have changed dramatically since the 1970s. There have been:

1. marked decreases in enrollment (from 6,301 in 1978 to 4,370 in 1987*),
2. significant increases in the number and percent of women represented in first year classes (from 1,000 and 15.9 percent in 1978 to 1,410 and 32.3 percent in 1987), and
3. major increases in the percent of minority students represented in first year classes (from 11.0 percent in 1978 to 20.5 percent 1987.**)

The present review will consider dental school minority group student applicants, enrollment and rates of attrition during the 1980s in an effort to determine any changes since the 1970s.

Ambiguity of minority status

Any effort to identify minority group student data is complicated by the inherent difficulties in determining the choice of ethnic categories to be reported. For example, Hispanic enrollment in the University of Puerto Rico School of Dentistry was not considered as minority enrollment prior to 1984. Since that time, all students are classified as Hispanic minority students. (For purposes of this study, for appropriate years, adjustments were carried out by adding the number of students at the University Puerto Rico to the Hispanic totals, and overall minority totals and subtracting the corresponding number from non-minority totals.)

In addition, upon admission to dental school, some students do not identify themselves as a member of a particular minority group. However, during the course of dental school study, these same students may "re-classify" themselves for personal reasons. For example, students may be required to specify that they are members of a minority group in order to secure financial support. This "re-classification" by students, in part, may explain the reason for an "increase" in the number of minority students graduating over the number of students in corresponding entering classes (particularly Asian Americans).

Finally, efforts directed at increasing minority group members as a means of overcoming underrepresentation within the health professions, would need to consider the relatively large number of Americans of Asian ancestry in the professions.[7]

Applicants and accepted students

The overall number of applicants to schools of dentistry has con-

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*Throughout this presentation:
1. a stated year represents the calendar year in which an academic year begins; e.g., 1980, represents the beginning of the academic year 1980–1981,
2. the year of graduation will indicate the calendar year in which the graduation occurred.

**The source of all data, not otherwise specified, in this report is from the Annual Report on Dental Education (2) and various supplements: Minority Report, (3) Applicant Analysis and Entering Class, (4) Trend Analysis (5) and Dental Student Attrition (6)

Table I. Number of applicants and percent of *APPLICANTS* enrolled in entering dental school classes by race and ethnicity, 1980–1987[4]

	Amer. Ind.		Asian		Black		Hispanic		Total Minority		White	
Year	No. Appl.	Per. Enrol.	No. Appl.	Per. Enrol.	No. Appl.	Per. Enrol.	No. Appl.	Per. Enrol.	No. Appl.	Per. Enrol.	No. Appl.	Per. Enrol.
1980	33	42.4%	549	55.0%	550	45.3%	410	49.5%	1,542	49.8%	7,251	65.0%
1981	33	60.4	555	60.5	498	45.1	469	51.0	1,555	52.7	6,758	68.3
1982	34	55.9	569	62.6	464	54.7	401	58.4	1,468	58.8	5,846	73.0
1983	28	42.9	584	65.6	517	52.4	400	58.8	1,529	58.9	5,318	74.2
1984	26	53.8	633	73.3	387	62.5	399	64.4	1,445	67.6	4,739	77.0
1985	20	80.0%	643	75.9%	400	57.5%	441	64.4%	1,504	67.7%	4,555	76.8%
1986	18	55.6	663	73.3	382	63.9	435	68.0	1,498	69.2	4,130	77.7
1987	44	72.7	807	76.2	357	67.8	444	76.4	1,652	74.5	3,638	78.9

Note: Data do not include applicants for whom race and ethnicity were not reported.

Applicant data are derived from the American Association of Dental School's Application Service (AADSAS). Over the years, a varying number of schools participated in this program. In 1987, 52 of the nation's 58 dental schools participated. "Unfortunately, it was not possible to collect a complete data set from all non-AADSAS schools."[4] Thus, data in this table should be used to indicate general trends and not compared directly to other tables in this presentation.

tinued to decrease during the 1980s. To a great extent, this decrease has reflected sharp decreases in the number of non-minority applicants. The number of minority applicants (approximately 1,500 per year) remained essentially constant. However, within the general minority classification, there were differences.

1. The number of American Indians and Hispanic American applicants changed very little.
2. The number of Asian Americans increased.
3. The number of Black Americans decreased. (Table I)

In 1980, approximately one half of the minority group applicants were accepted into entering dental school classes; compared to 65 percent of white applicants. By 1987, reflecting the decreasing size of the applicant pool, increases occurred in the percent of applicants accepted; with rate differences between ethnic and racial groups disappearing—except for lower acceptance rates for black applicants. (Table I) Data are not available on the basis of racial or ethnic classifications for the predental college academic performance and Dental Admissions Test scores of the general pool of applicants or accepted applicants.[8]

Enrolled students

Between 1976 and 1987, there was a continuing increase in the number of minority students enrolled in first year classes (a 60 percent increase in males and a 209 percent increase in females). (Note: all minority and non-minority data are presented in terms of the adjustments carried out for the number of Hispanic students enrolled at the University of Puerto Rico.) (See Tables II and IV for specific number changes) During this same period, (except for a slight increase through 1978) there was a decrease of 2,400 white males in first year classes (more than a 50 percent reduction). Between 1976 and the early and mid 1980s, white female students increased by approximately 50 percent. Since 1984, smaller number of white females have been enrolled in first year classes. Nevertheless, between 1976 and 1987, there was a one third increase in the number of white female students.

By 1987, minority male students constituted one quarter of first year class male students. Female minority students constituted 38 percent of entering class female students. (Table II)

The marked increases in the total number of minority students was not distributed equally amongst all minority groups. Between 1976 and 1987:

American Indians—there was minimal change in the usual small number of students.

Asian Americans—there was a 176 percent increase in male students and a 645 percent increase in female students.

Black Americans—there was an approximate 25 percent decrease in male and a one third increase in female students.

Hispanic Americans—there was a 70 percent increase in male and 297 percent increase in female students. (Table II)

Withdrawal from dental school

Once enrolled in dental schools, varying numbers of students withdraw from school prior to the completion of the course of training as a result of personal and academic reasons. In most years, personal reasons for withdrawal are cited more often than academic reasons. In the second half of the 1980s, the ADA has provided increased in-

Table II. Number and percent male and female students *ENROLLED IN ENTERING CLASS* in dental school by race and ethnicity, 1976-1987[2,3]

	Number												Percent Minorities Of Each Gender In Class	
	Amer. Ind.		Asian		Black		Hispanic		Total Minority		White			
Year	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.
1976*	16	3	141	33	188	102	126	36	471	174	4,662	628	9.2%	21.7%
1977*	7	3	181	44	191	105	130	44	509	196	4,565	684	10.0	22.2
1978*	14	2	211	52	163	117	132	56	520	227	4,781	733	9.8	22.7
1979*	13	6	226	63	171	103	161	68	571	240	4,485	836	11.3	22.3
1980*	11	1	228	89	179	104	167	59	585	253	4,251	941	11.8	21.2
1981*	15	6	251	122	172	127	168	81	606	336	3,981	932	13.2%	26.4%
1982*	13	3	275	112	170	119	181	71	639	306	3,636	918	14.9	25.0
1983*	16	3	267	139	155	121	156	83	594	346	3,359	967	14.9	26.3
1984	13	4	311	154	164	135	158	106	646	399	3,032	970	17.6	29.1
1985	10	6	314	182	152	129	190	122	666	439	2,853	885	18.9	33.2
1986	5	4	305	194	151	135	188	128	649	461	2,518	832	20.5%	33.2%
1987	11	9	390	246	140	140	215	143	756	538	2,204	872	25.5	38.2

*The number of male and female students enrolled in entering classes between 1976-1983 have been adjusted for Hispanic, Total Minority and White categories, as well as percent minorities in entering class, to place totals in line with the decision in 1984 to re-classify the total enrollment at the University of Puerto Rico as Hispanic.

Adjustment figures that were added to enrolled Hispanic students:

	Male	Female		Male	Female
1976	47	19	1980	42	24
1977	42	22	1981	37	29
1978	34	32	1982	48	17
1979	43	23	1983	41	26

formation on the rates of attrition for the various minorities. However, because of numerous changes in format, comparisons over extended periods of time are difficult. The latest attrition document for 1987/88 continues to report that for the 1986 academic year, all ethnic and racial groups of first and second year students, (except black students), cite personal reasons more often than academic reasons for their withdrawal from dental school. Two thirds of first year and 71 percent of second year black students cited academic reasons for their withdrawal.

During the 1970s, approximately 3.5 percent of the entering class withdrew during the first year; 2.2 percent in the second year and progressively smaller percents in subsequent years. Through the 1980s, there has been a progressive increase in the rate of withdrawal. By 1985 it reached 8.2 percent in the first year and 4.2 percent in the second year. However, in 1986, for the first time in the decade, there was a reversal in the upward trend. The attrition rate for the first year decreased to 6.9 percent. (Table III)

Data limitation

In addition to the difficulty of using ADA data to review minority group rate of attrition over extended periods of time, other complicating problems include: students repeating years, taking leaves of absence, transferring from one school to another, varying lengths of the curriculum, (Harvard University has a five year course of study while the University of the Pacific has a three year program), the elimination of three year programs (e.g. New York University), student self re-classification, and numbers of foreign students entering dental schools with advance standing.

Because of these numerous complications, only indications of general trends may be gained from these data. *The numerical listings should not be considered as exact.*

For purposes of determining the rates of attrition, the following steps were carried out:

1. The redistributed (correcting the Hispanic classification at the University Puerto Rico prior to 1984) total number of graduates from U.S. dental schools on the basis of racial and ethnic categories were subtracted from the corresponding entering categories of students in classes four years prior to the year of graduation.
2. The resultant number of stu-

Table III. Attrition from schools of dentistry by reason and year: 1975, 1980–1985[5,6]

		1st year attrition					
	1st year Enrollment	Personal Reason	Academic Reason	Total	2nd Year	3rd Year	4th Year
1975	5,763	1.9%	1.6%	3.5%	2.2%	1.2%	0.5%
1980	6,030	2.8	1.5	4.3	2.1	1.5	0.5
1981	5,855	2.9	2.0	5.0	2.3	1.2	0.5
1982	5,498	3.2	2.5	5.7	2.5	1.5	0.2
1983	5,274	3.9	2.9	6.8	2.6	1.5	0.5
1984	4,937	3.4	3.8	7.2	3.5	1.3	0.5
1985	4,843	4.4	3.9	8.2	4.2	1.8	0.7
1986	4,554	3.7	3.2	6.9	4.9	1.5	0.5

dents were divided by the numbers of students in the appropriate entering class.

Dental school graduates

The significant decline of the entering class sizes that began in the late 1970s is reflected in the marked drop in the total number of dental students in the 1980s—particularly amongst white males (approximately a 30 percent decrease between the early 1980s and 1987). During the same period the number of white female graduates increased by approximately 50 percent; the small number of American Indians graduates remained relatively constant; Asian American males increased by two thirds and females by 250 percent; black Americans first increased and then decreased; and Hispanic Americans increased. (Table IV)

Rates of attrition

Again, it should be emphasized that the intent of this presentation was to review, over an extended period of time, the general trends in the rates of attrition for the various ethnic and racial groups. From this general perspective, during the late 1970s and through most of the 1980s:

1. *Males and females*—Except for American Indians (extremely small numbers permit wide variations resulting from changes by just a few students) on average, there were minimal differences by gender.
2. *American Indians*—there were

Table IV. Number and percent male and female students *GRADUATING* from dental school by race and ethnicity, 1980–1987[2,3]

	Number												Percent Minorities Of Each Gender In Year	
	Amer. Ind.		Asian		Black		Hispanic		Total Minority		White			
Year of Graduation	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.
1980*	13	1	161	36	116	74	139	43	429	154	4,122	561	9.4%	21.5%
1981*	12	2	194	52	131	83	110	35	447	172	4,278	643	9.5	20.8
1982*	12	—	206	59	141	86	121	56	480	201	4,053	637	10.6	23.9
1983*	9	3	163	52	127	73	152	56	451	186	4,312**	807**	9.5	18.7
1984	7	2	218	86	139	80	144	48	508	216	3,766	847	11.9	20.3
1985	13	4	266	112	118	105	147	66	544	287	3,669	855	12.9%	25.2%
1986	9	1	264	118	119	76	141	67	533	262	3,330	832	13.8	23.9
1987	9	2	270	126	120	90	157	74	556	292	3,025	844	15.5	25.7

*The number of male and female students graduating between 1980–1983 have been adjusted for Hispanic, Total Minority and White categories, as well as percent minorities in graduating year, to place totals in line with the decision in 1984 to re-classify the total enrollment at the University of Puerto Rico as Hispanic.

Adjustment figures that were added to Hispanic graduates:

	Male	Female
1980	44	19
1981	36	19
1982	35	32
1983	43	23

**Graduates not reported by gender. The number of male and female graduates was estimated based upon the male/female ratio in the 1982–83 fourth year class.

Table V. Rate of attrition between entering and graduating male and female dental students by race and ethnicity, 1980–1987[2,3]

Year of Graduation	Amer. Ind.		Asian		Black		Hispanic		Total Minority		White	
	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.
1980	18.7%	66.6%	*	*	38.3%	27.5%	*	*	8.9%	11.5%	11.8%	10.7%
1981	*	33.3	*	*	31.4	20.9	15.4	270.5	12.2	12.2	6.3	5.9
1982	14.2	100.0	2.4	*	13.4	26.5	8.3	0.0	7.7	11.5	15.2	17.6
1983	30.8	50.0	27.8	17.5	25.7	29.1	5.6	17.6	21.0	22.5	3.9	3.4
1984	36.4	*	4.4	3.4	22.3	23.1	13.3	18.6	13.2	14.6	11.4	9.9
1985	13.3	33.3	*	8.2	31.4	17.3	12.5	18.5	10.2	14.6	7.8	8.3
1986	30.7	66.6	4.0	*	30.0	36.1	22.1	5.6	16.5	14.4	8.4	9.4
1987	43.8	33.3	*	9.4	22.6	25.6	*	10.8	6.4	15.6	9.9	12.7
Average 1980–1987	20.0%	44.4%	2.1%	1.9%	27.2%	25.7%	9.0	10.6	12.2%	14.7	9.4	9.8%

*More graduates than entering class number

Note: Because of the small number of American Indians enrolled in schools of dentistry, even minor changes in the number of students will have marked effect on rates of attrition.

wide variations in attrition rates, with no constant patterns.

3. *Asian Americans*—with few exceptions, attrition rates were extremely low; far lower than the rates for non-minority students. In many years, there were more Asian student graduates than were identified in the respective entering classes four years before the date of graduation.
4. *Black Americans*—overall rates of attrition were the highest for all groups; more than 250 percent higher than the rates for non-minority students.
5. *Hispanic*—generally approximated non-minority rates.

The marked differences between minority and non-minority acceptance rates and dental students rates of attrition observed during the 1970s (the period of increasing student enrollment in schools of dentistry) has diminished significantly in the 1980s—*except for black dental students.* In the earlier presentation, the call was for support programs for minority students.

> "At a time when varying means are needed to expand the delivery of dental services to traditionally underserved populations, can the profession afford to lose large numbers of minority group practitioners."[1]

The results from the current review indicate that this call must be repeated—but specifically for black students. Fewer black students are applying to dental schools. In addition, as compared to other population groups, a smaller percent of black applicants are being accepted to schools, and those that are accepted experience a higher rate of attrition.

In a period of decreasing numbers of applicants to schools of dentistry, can the profession and the affected public not support the efforts needed to attract and maintain qualified black men and women for the delivery of dental services to all ethnic and racial groups?

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State University of New York
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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:

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2. White, E.M., Sometimes an A is Really an F. The Chronical of Higher Education, 9:24, February 3, 1975.

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NEWS OF FELLOWS

Wallace V. Mann, Jr. was recently named Acting University Provost at the University of Louisville, where he had been serving as Dean of the School of Dentistry since October, 1986. Prior to joining the University of Louisville, Dr. Mann was Dean of the University of Mississippi School of Dentistry for 12 years. He is the dental representative on the National Advisory Council for the Health Professions, an appointment made by the Secretary of Health and Human Services. This Committee advises the President on matters relating to health policy and manpower planning. Dr. Mann has served as President of the Southern Association of Deans and Dental Examiners and as President of the American Association of Dental Schools. He has also served as a member of the Council on Dental Education and the Commission on Dental Accreditation of the American Dental Association.

Wallace V. Mann, Jr.

Abram I. Chasens who, until recently, served as Professor and Chairman of the Department of Periodontics and Oral Medicine at Fairleigh S. Dickinson, Jr., College of Dental Medicine, was honored at a testimonial luncheon by alumni, faculty and friends. Dr. Chasens retired after a distinguished career of 52 years in dentistry. He is a Diplomate of the American Board of Periodontology, as well as of the American Board of Oral Medicine. He has served as a director of both the Boards and is a past president of the American Academy of Oral Medicine.

Abram I. Chasens

Henry M. Cherrick was recently appointed Dean and Professor of Oral and Maxillofacial Surgery at the UCLA School of Dentistry. Prior to this, he served, for seven years as the Dean of the College of Dentistry, University of Nebraska Medical Center. A Diplomate of the American Board of Oral Pathology, Dr. Cherrick also served as the Dean of the Southern Illinois University School of Dental Medicine. He is the author of numerous publications and has lectured extensively.

Henry M. Cherrick

Gardner P. H. Foley was recently honored as the recipient of the Callahan Award by the Ohio Dental Association for his outstanding contributions to the profession. Dr. Foley's extensive research and writing has established the role that dentistry has played in history. He has been associated with the teaching of dental history at the University of Maryland School of Dentistry. His "Treasury of Dentistry" is a regular feature with the ACD *JOURNAL* and, earlier, his Foley's Footnotes were featured in the ADA Journal.

Gardner P. H. Foley

Kenneth Lee Kalkwarf was recently named Dean of the University of Texas Health Science Center at San Antonio School of Dentistry. Dr. Kalkwarf has served at San Antonio as Associate Dean for Advanced Education since May, 1987 and was previously on the faculties of the University of Oklahoma and the University of Nebraska. Dr. Kalkwarf is a consultant to the Commission on Dental Accreditation and the Joint Commission on National Board Examinations.

Kenneth L. Kalkwarf

Richard L. Miller was recently named Acting Dean of the University of Louisville School of Dentistry where he was the Associate Dean for Academic and Clinical Affairs. Dr. Miller, who has a Ph.D. in Pathology from the University of New York at Buffalo and is a Diplomate of the American Board of Oral Pathology, has remained active in teaching and research. He has authored or co-authored two books and several journal articles. He is a consultant to the Council on Dental Accreditation of the American Dental Association.

Richard L. Miller

H. Thomas Chandler, formerly Assistant Surgeon General for Dental Services and Chief of the United States Army Dental Corps, was recently named Associate Dean for Professional Development at the University of Maryland Dental School. Dr. Chandler will direct the newly-created Center for Professional Development which will provide an integrated professional development curriculum for health care personnel and continuing professional development for Dental School faculty members. Before retiring from the U.S. Army in 1986 as a Major General, Dr. Chandler served assignments in the United States, Europe and Vietnam. He has been the recipient of the Distinguished Service Medal, the Bronze Star Medal and a Presidential Citation from the American Dental Association.

Ralph W. Phillips

Ralph W. Phillips, Research Professor of Dental Materials at the Indiana University School of Dentistry, received an honorary degree of Doctor of Science from McGill University in Montreal recently. An internationally renowned scientist, teacher and author of hundreds of papers and several textbooks, Dr. Phillips has appeared on more than 1,000 scientific programs throughout the world.

David H. Werking

H. Thomas Chandler

David L. Koth was recently appointed Chairman of the newly created Department of Restorative Dentistry at the University of Alabama at Birmingham School of Dentistry. The new department combines the former departments of Operative Dentistry, Endodontics, Fixed Prosthodontics and Removable Prosthodontics. Dr. Koth has also served as Director of Fixed Prosthodontics at the Medical College of Georgia School of Dentistry and was the Chairman of the Department of Fixed Prosthodontics at the University of North Carolina School of Dentistry in Chapel Hill before assuming his current position. Dr. Koth is a member of the American Board of Prosthodontics and a member of the editorial review board of the Journal of Prosthetic Dentistry.

David H. Werking, of Greeley, Colorado was featured in an article in the May 23rd issue of USA Today. Dr. Werking was cited for the innovative program "The Greeley Dream Team" aimed at motivating students not to drop out of school and to finish their education. The Dream Team identifies the needs of students from early childhood and then provides a $2,000 scholarship to be used to attend a vocational, community or four year institution. Students are also matched with mentors in the community to help guide them along with their careers. Dr. Werking is the Mayor Pro-tem of Greeley and serves on several local and state civic organizations. He is in the private practice of Orthodontics in Greeley and is the chairman of the Colorado Section of the College.

Life Fellow Collister Wheeler Continues to Enjoy Athletic Competition at Age 95

After celebrating his 95th birthday, Dr. Collister Wheeler of Portland, Oregon threw the discus 48′ 7″ and hurled the javelin 46′ 10″ in the Northwest Regional Masters Track and Field Championships. A good athlete all of his life, Dr. Wheeler entered his first track meet at the age of 83 and set records in several events. He ran the 100 meter race in 20.14 seconds and threw the discus a record distance of 65′ 9½″. The

Continued on next page

Dr. Philip J. Boyne of Loma Linda, California on the left and Dr. Walter Johnson, Chairman of the Oregon Section on the right, are seen with Dr. Collister Wheeler at his 95th birthday celebration which was attended by over 100 of his friends and well-wishers.

Fellows of the American College of Dentists Honored by the University of Pittsburgh

Four dentists honored by the University of Pittsburgh recently are Fellows of the American College of Dentists. Recipients of the University of Pittsburgh's bicentennial medallion of distinction presented to alumni who's scholarship, leadership and services have brought honor to the University are; **George W. Campbell, Charles E. McDermott, Marvin Sniderman and Kay F. Thompson.**

Kay F. Thompson

Kay F. Thompson has held faculty appointments at the West Virginia University and the University of Pittsburgh and has lectured extensively. She has served as the Associate Editor of the American Journal of Clinical Hypnosis and was the President of the American Society of Clinical Hypnosis. She has served as consultant to the Bureau of Dental Health Education of the ADA and to the National Institutes of Health and the Veterans Administration Medical Center at Pittsburgh.

Charles E. McDermott

Charles E. McDermott served as the president of the Pennsylvania Dental Association in 1962 and was also the president of the Pennsylvania Health Council. He served as Regent of the American College of Dentists from 1970–75 and was president of the College in 1978.

George W. Campbell

George W. Campbell received his specialty training in Oral and Maxillofacial Surgery from the University of Texas Medical Branch in Galveston, Texas and is presently in the practice of Oral and Maxillofacial Surgery in Rochester, Pennsylvania.

Marvin Sniderman

Marvin Sniderman is serving as Chief of dental Services at the Home for Crippled Children and is the Editor of the Pennsylvania Dental Journal. He has served as President of the Odontological Society of Western Pennsylvania and has lectured extensively at several universities.

SECTION ACTIVITIES

Oklahoma

The Oklahoma Section elected its 1988–89 officers at a meeting held in Oklahoma City and chaired by Dr. Dan E. Brannin. The new officers are: Dr. Dean L. Johnson, chairman; Dr. James A. Thomas, Vice Chairman and Dr. Evangeline G. Greer, Secretary/Treasurer. Dr. Earl R. Cunningham was recognized for having completed 25 years of Fellowship in the College. The Section also presented an outstanding student award consisting of a plaque and a check for $100 to a dental student.

Florida

The Florida section held its annual breakfast meeting in conjunction with the annual meeting of the Florida Dental Association on July 2nd. The meeting attended by 97 ACD Fellows and 22 senior dental students, was conducted by Section Chairman, Dr. Earl L. Williams. Dr. Robert W. Elliott, Jr., President of the American College of Dentists, and Dr. Donald W. Legler, Dean, University of Florida College of Dentistry, spoke at the meeting which was also the occasion to recognize and honor an outstanding senior dental student, as well as an ACD Fellow of the Florida Section. Dr. Robert L. Kaplan, of Miami Beach, was the recipient of the Les Bell Service Award for outstanding service to the Florida Section.

Upper Midwest

The Upper Midwest Section installed its slate of officers for 1988–89 at its annual meeting recently. Held in St. Paul, Minnesota, the meeting was chaired by Section Chairman, Dr. Edgar F. Ziegler. The new section officers are: Chairman, Dr. Gordon C. Amundson; Vice Chairman, Dr. George L. Humphrey; Secretary/Treasurer, Dr. Odin M. Langsjoen; Immediate Past President and Chairman of the Nominating Committee, Dr. Edgar F. Ziegler. The Upper Midwest section includes Minnesota, North and South Dakota and Manitoba, Canada. The Section has 151 Fellows and, once again, contributed half of its Section dues to the American College of Dentists Foundation.

Metropolitan Washington

The Metropolitan Washington Section elected and installed its officers for the 1988–89 year at the Section's annual meeting held recently. The new officers are: Chairman, Dr. James T. Jackson; Vice Chairman, Dr. William H. Lady; and Secretary/Treasurer, Dr. Stanley P. Hazen. Other members of the Section's Executive Committee are: Members at Large, Dr. George W. Young and Dr. Richard J. Grisius; Immediate Past President, Dr. Joseph R. Salcetti and Editor, Dr. Aida A. Chohayeb.

Photographed at the Metropolitan Washington Section's meeting are from the left: Dr. James T. Jackson, Dr. Stanley A. Milobsky, Dr. Aida A. Chohayeb, Dr. Joseph R. Salcetti, Dr. Richard J. Grisius and Dr. Stanley P. Hazen.

Continued from page 44

following year, he threw the javelin 69′ 2″, a record that has stood for the past 11 years. Besides the discus and javelin, he also set a world record in long jump, before moving into the 85–90 age group. At age 88, he won a weight-lifting contest in New Zealand with a dead weight lift of 275 pounds.

Dr. Wheeler works out regularly with weights and, besides track and field, also competes in masters swimming. A 1923 graduate of the North Pacific College of Dentistry, he practiced dentistry in Portland, Oregon until the age of 75. Dr. Wheeler and his wife Frances seldom miss the Oregon Section's meeting and are usually present at other dental alumni, as well as state dental meetings.

DECEASED FELLOWS

September 15, 1987–September 15, 1988

*ALLEN, EDWARD
Webster Groves, Missouri

*ANDERSON, JAMES G., JR.
Ghent, West Virginia

ANDREWS, DALE H.
Missouri City, Texas

*ARMBRECHT, EDWARD C.
Wheeling, West Virginia

*AUSLANDER, WALTER P.
Royal Palm Beach, Florida

*BAILEY, BYRON W.
Auburn, California

*BENEDIKTSON, JOHN B.
Twain Harte, California

*BENNETT, PAUL H.
Tucson, Arizona

BERRY, JAMES R.
Tulsa, Oklahoma

*BOMAN, GUSTAF E.
Duluth, Minnesota

BORDELON, JAMES P.
Thibodaux, Louisiana

*BOUCHON, FERNAND
Paris, France

BOWDISH, E. WILLARD
Utica, New York

*BRAUN, HERMAN
Vero Beach, Florida

*BREWER, ALLEN A.
Rochester, New York

*BROADHURST, GEORGE B.
Webster Groves, Missouri

BUDOWSKY, JACK
Boynton Beach, Florida

*BUSH, E. OGDEN
Delhi, New York

CAGE, WILLIAM F.
Phoenix, Arizona

*CHEO, ERIC SHAO-WU
Ontario, Canada

COSTIGAN, WARREN E.
Agnew, California

*COVERT, SR., HAROLD W.
Allentown, Pennsylvania

*CREECH, JOHN W.
Walnut Creek, California

*DANFORTH, HARRY D.
Cissna Park, Illinois

*DENUX, ALTON R.
Marksville, Louisiana

*DILLON, EDWARD L.
Kansas City, Missouri

*DOBBS, ALTON A.
Erwin, Tennessee

*DUNDON, WALTER
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