The JOURNAL of the AMERICAN COLLEGE of DENTISTS

The Fiftieth Anniversary
The Professional Concept
Dental Diseases
The Structures of Dentistry
Administration of Dental Care
Organizations



The Journal of the American College of Dentists is published quarterly—in January, April, July, and October—at 1201-05 Bluff Street, Fulton, Missouri 65251.

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NEWS AND COMMENT

With this issue, the Journal begins the publication of a news report, which takes the place of the separately printed A.C.D. Reporter. Information of interest to the membership will be featured, as well as Section News, announcements, and items concerning the activities of our members. Kindly send information for publication to the Editor.

International Hotel in Las Vegas Is Site of Golden Anniversary Meeting

The Fiftieth Anniversary meeting and convocation of the American College of Dentists will take place on Saturday and Sunday, November 7 and 8, 1970 at the new International Hotel in Las Vegas.

A program of special events is being planned by the Anniversary Committee, under the Chairmanship of Past-President Henry A. Swanson. There will be an awards luncheon, an historical sketch depicting the founding of the College, and a series of presentations on the companion topics, "The Past Is but a Prologue" and "The Future Is a Challenge," as well as the annual membership meeting, convocation ceremony and president's dinner.

This is a program which all fellows will wish to attend.

History of the College in Preparation by Dr. Brandhorst

President-Elect Otto W. Brandhorst, long-time Secretary of the College, is putting the finishing touches to a fifty year history of the College which he has been preparing for a number of years. It will be printed shortly and distributed at the Las Vegas meeting. Dr. Brandhorst now occupies a new office, located at 16 Hampton Village Plaza, Suite 212, Medical Building, St. Louis, Missouri 63109.

College Office Relocating Near Washington

Secretary Nelsen and his site selection committee have chosen a new central office location in Bethesda, Maryland, on the outskirts of Washington. It is expected that the move from the St. Louis office will take place in the near future, when all of the details of the transfer have been worked out.

Anniversary Seal Designed by Fellow Jack Feder

Dr. Jack Feder of South Orange, New Jersey, a practicing dentist who has won acclaim as an artist, has designed the Golden Anniversary Seal displayed on this month's cover. Dr. Feder's work will also be seen on other printed matter associated with this year's observance.

Nominations Due by March First

Members who are preparing fellowship nomination forms are requested by Secretary Nelsen to send them in to the central office as early as possible before the March first deadline. He reminds those preparing the forms that the Board of Censors requires that all questions be answered, and that the terms "none" or "not applicable" be used where appropriate rather than leaving lines blank. Dr. Nelsen also suggests that consideration be given to the nominations of qualified persons of promise and achievement.

SECTION NEWS

Illinois Section Meets in February

The Illinois Section will hold a luncheon meeting at noon on Sunday, February 15, 1970 in the Lower Tower Ballroom of the Conrad Hilton Hotel, Chicago, in conjunction with the 105th Midwinter Meeting of the Chicago Dental Society. Tickets are seven dollars, and reservations may be made with the Section Secretary, Dr. William O. Vopata, 21 North Delaplaine Ave., Riverside, Illinois 60546.

Kansas City Midwest Section

The Kansas City Midwest Section held its annual business meeting at the Hotel Muehlebach, March 10, 1969. Nineteen members were present and two guests from another section. Dr. James W. Kapp, Section Chairman, presided.

The report of the Emergency Student Loan Fund was made by the Secretary from information provided by the Dean, Dr. H. B. G. Robinson and Dr. Charles Schooler, administrators of the fund at the College. Dr. Jack Wells commented favorably on the activity and usefulness of the loan fund. At the present time money for student loans seems to be adequate. Dr. Wells, Chairman of the Project Committee, reported no other activity under way.

The following new members were introduced: Doctors Donald B. Amend, Salina, Kansas; Richard H. Hamilton, Topeka, Kansas; Ashley H. Sills, Jr. and Frank A. Burdick, Kansas City, Missouri.

Dr. John Richmond, one of our fellow members, was honored by the University of Missouri-Kansas City Alumni Association as Man of the Year.

Dr. Harry M. Klenda was elected to the office of President-Elect of the American Dental Association.

Officers for the ensuing year were elected as follows: Chairman, Dr. Carl W. Sawyer, Vice Chairman, Dr. Harry Cook, Secretary-Treasurer, Dr. Edward P. Nelson.

Edward P. Nelson Secretary-Treasurer

New Jersey Section

The New Jersey Section met on October 23, 1969 for dinner at the Coronet in Irvington. Chairman Frank Frates presided. The Secretary welcomed Dave Alterman, Larry Churgin and Tony La-Forgia, who were attending their first meeting of the New Jersey Section since being inducted into fellowship at the recent convocation of the College in New York.

Reporting on Operation Bookshelf, Doug Hoyt said that he had delivered all of the journals and texts received in the past year to the Norfolk Navy Yard for transportation and distribution overseas. He noted that the contributions of the Fellows of the New Jersey Section almost filled his station wagon, and he circulated several pictures of the heavily loaded automobile taken as he started out for Norfolk. He also stated that he had received a letter of acknowledgement indicating that this was one of the largest contributions received from any section of the college.

Bob Kaplan gave an informal report of the meeting of the Board of Regents. He noted that the 1970 convocation in Las Vegas will mark the 50th anniversary of the College and expressed the hope that there would be a large representation of Fellows in attendance.

Chairman Frank Frates introduced Jack Feder as the speaker of the evening. Jack's subject, "Art and Dentistry," reflected his many years of experience in following twin careers as an artist and a dentist. His slides pictured a wide variety of sculptured objects, many of them in a humorous or philosophical vein, employing various media such as wood, metal and ceramics, and executed with taste and imagination.

Brainerd F. Swain Secretary-Treasurer

Western New York Section

The Western New York Section met for dinner on November 6, 1969 at the Corning Glass Center Club, Corning, New York.

The speaker of the evening was Mr. Campbell Rutledge, Jr., Vice President of Sales and Public Relations of the Corning Glass Works, whose topic was "Public Relations Is Everybody's Business." Lawrence L. Mulcahy, Jr. of Batavia was in charge of the program.

Northern California Section

The Northern California Section of the American College of Dentists held its annual general membership Fellowship Dinner December 9, 1969. Eighty-five members and guests were in attendance at the meeting which was held in the Faculty Club, Millberry Union, University of California Medical Center, San Francisco, California.

Chairman Joseph A. Sciutto presided and introduced Regent James P. Vernetti who indoctrinated Doctors L. R. Quiros, Burton Press, Ronald Nicholson, Herbert Twede, Stanley Lawrence, Malcolm Jendresen and Kenneth Soelberg as newly elected Fellows into the Section. Two new Fellows, Thomas Beare and Robert Cater were unable to attend.

Vice Chairman Francis L. Bushnell introduced Drs. Samuel Wycoff and Angus Grant as transferees into the Section and Dean John J. Salley from the School of Dentistry, University of Maryland as a special guest of the evening.

Dr. Dale F. Redig presented the main address, entitled "Dental Auxiliaries, Their Future and Ours." Dr. Redig is Dean of the Dental School, College of Physicians and Surgeons, University of the Pacific, San Francisco and was given a hearty welcome as a new member of the Section.

Lewis H. Daniel.
Secretary-Treasurer

The JOURNAL of the AMERICAN COLLEGE of DENTISTS

A QUARTERLY PRESENTING IDEAS IN DENTISTRY

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Frank P. Bowyer, Jr. President 1969-1970

Our New President

Dr. Frank P. Bowyer, Jr. of Knoxville, Tennessee is the 1969-70 President of the American College of Dentists. A native of Tampa, Florida, he received his pre-dental training at the University of Florida and graduated with honors from the University of Tennessee College of Dentistry in 1939. From 1939 to 1943 he received advance training in orthodontics as an associate of the late Dr. Oren Oliver of Nashville. In 1943 he was assigned to Knoxville and Oak Ridge, Tennessee by the Procurement and Assignment Division of the Manpower Commission to render orthodontic service and serve as dental consultant to the Manhattan Project. During the Korean War, Dr. Bowyer served as Major in the U.S. Air Force. Following his discharge in January, 1955, he resumed orthodontic practice in Knoxville.

Over the past 30 years, Dr. Bowyer has been very active in his general dental and specialty dental organizations. In all of them, he has served on numerous committees and councils and was recognized for his efforts by being elected president of the following organizations: Second District Dental Society, Tennessee State Dental Association, Southern Society of Orthodontists, American Board of Orthodontics, the American Association of Orthodontists and the Tri-State Section of the American College of Dentists. Dr. Bowyer is a past regent and past vice president of the American College of Dentists.

He has lectured at many colleges of dentistry and has given clinics and lectures before many component and constituent dental societies throughout the United States.

Currently he is chairman of Tennessee State Dental Association Council on Legislation and is a delegate to the American Dental Association. He is a member of the ADA Council on International Relations and a consultant to the ADA Council on Dental Education. He is serving his third term as Speaker of the House of Delegates of the American Association of Orthodontists.

Dr. Bowyer is past-president and member of the board of the Tennessee Hearing and Speech Foundation. He was chairman of the committee that established the East Tennessee Hearing and Speech Center and served as president of its board for five years. He is still a member of this board. He also served as chairman of a committee which established the East Tennessee Cerebral Palsy Center and a regional public health dental clinic. Dr. Bowyer was also instrumental in establishing a clinic for cleft palate children in this area. This clinic coordinates the services of surgeons, pediatricians, dentists, orthodontists and speech therapists for the complete rehabilitation of these children.

Dr. Bowyer served as original chairman of the Tennessee State Dental Association Dental Health Workshop which is nationally recognized for its continuing contributions to dental health for the people of Tennessee. He still serves as a consultant to the Tennessee Workshop. He has served or is presently serving as a member of the Advisory Council to the Tennessee Commissioner of Public Health, the Tennessee Hospital Licensing Board, the Knox County Board of Health, as well as a consultant to the Tennessee Crippled Children Service and the U.S. Public Health Service. Because of his many activities in the field of public health, he was recognized with a "State Award and Citation" from the state of Tennessee and was made a fellow of the American Public Health Association. Dr. Bowyer was recently appointed by the Surgeon General of the U.S. Public Health Service to the Regional Health Advisory Council for the Southeastern States.

Additional honors bestowed on Dr. Bowyer through the years in recognition of outstanding contributions to his profession include "Dentist of the Year," Second District Dental Society; honorary fellowship in the Tennessee State Dental Association, fellowship in the International College of Dentists, and "Man of the Year" of the Tennessee Chapter of the Pierre Fauchard Academy. He is a diplomate of the American Board of Orthodontics and a member of Omicron Kappa Upsilon honorary dental society.

In 1951, he served as president of the Knoxville Junior Chamber of Commerce and was selected as Knoxville's "Young Man of the Year" and also received the United States Junior Chamber of Commerce "Distinguished Service Award."

In 1959 Governor Frank Clement appointed Dr. Bowyer to a 12-year term on the University of Tennessee Board of Trustees. In this position, he serves as a member of the Building Committee, the Committee on Academic Affairs, the Medical Units and U. T. Memorial Hospital Committee, and Air Space Institute Committee. He is chairman of the College of Engineering Committee and the Committee on Development and Public Relations.

In more recent years his interest outside of professional activities has been in Masonic work. In addition to his Blue Lodge he has been a very active 32 degree Scottish Rite Mason serving as a ritualist in several degrees and as Director of Ritual Work for the East Tennessee Consistory. He is also a Knight Templar, York Rite Mason and a member of the Kerbela Temple and the Royal Order of Jesters. For his many Masonic and civic contributions, he was presented the "Venerable Masters Award" designating him the outstanding Scottish Rite Mason in East Tennessee. His highest Masonic honor was in being coronated a 33 degree Scottish Rite Mason in 1961.

Currently, Dr. Bowyer finds no time from his professional activities for hobbies but a few years ago he was a better than average golfer and spent some of his free time boating on the beautiful lakes of East Tennessee.

Having been an excellent swimmer in his college days, it is quite natural that he helped develop Knoxville's first Aquatic Club and coached his own children and many other children of the community in various age groups to swimming championships. During this period he served as vice president of the Southeastern Amateur Athletic Union.

Dr. Bowyer and his wife, Doris, have three children. Their son, Frank, III, is a pediatrician, presently assigned to the U.S. Public Health Communicable Disease Center in Atlanta, Georgia. He is married to the former Betty Dobbins of Nashville. Their daughter, Marianne, is married to a young attorney in Knoxville, Mr. Lawrence House. Their daughter, Patricia, is the wife of a dentist, Dr. Stephen Ollard, who is presently in the University of Tennessee Graduate School of Orthodontics. The Bowyers have six grandchildren.

With his distinguished background of leadership and service, the selection of Frank P. Bowyer as President of the American College of Dentists was a most appropriate one. His energetic approach to the problems that presently confront us should produce the solutions we seek and enhance the significance of the College to its members and to the entire profession.

Our Own Generation Gap

The American College of Dentists is becoming an organization of the elderly, according to a survey by Secretary Robert J. Nelsen. His study as noted in the last issue of the A.C.D. Reporter, shows that our membership is constituted as follows:

Ninety-nine per cent are over the age of 40, 78 per cent are over 50, 50 per cent are over 60 and 21 per cent are over 70.

President Stanley Lovestedt, in his address at the recent convocation in New York calls this "tragically unbalanced" for an organization comprising the leaders of American dentistry, refers to it as "our own generation gap."

It is understandable that an individual must give a number of years of service and effort to his profession before reaching the stature which makes him eligible for recognition by the College. For this reason, fellowship has rarely been conferred on anyone under the age of forty. But the preamble to our Constitution states that fellowships may be awarded: "In order to give encouragement to individuals to further the objectives (of the College), and to recognize meritorious achievements and *potentials* for contributions in dental science, art, education, literature, human relations, and other areas that contribute to the human welfare. . . ."

In seeking out persons deserving of fellowship, therefore, consideration should be given to young men of promise, whose achievements, though not presently numerous, have been of such quality as to indicate that the potential exists for continued growth.

Leaders do not always emerge quickly in professional life, but the characteristics of leadership may be seen early. The individual who works unselfishly for his dental organizations, who shows a sense of civic responsibility and willingness to take part in community service, seeking no personal aggrandizement, is the one who should be singled out and considered for nomination for fellowship. Not "what has he done?" but "what can he do?" could well be a criterion for election.

R. I. K.

The Fiftieth Anniversary of the American College of Dentists

Its Meaning to Dentistry*

HENRY A. SWANSON, D.D.S.†

FORTY-NINE years ago four dentists, all dedicated professional men, leaders in the dental profession, conceived the formation of a new organization which would have, as its basic principle, "the ideal that has the welfare of humanity, the advancement of society and the benefit of the individuals composing it as its central and controlling thought."

They visualized an organization that would be a stimulus to men for constructive growth in the field of dental education and research. The organization would bestow upon such men a degree for their meritorious achievements.

On August 20, 1920, the organizers, together with 25 additional invited dentists met for the purpose of formal organization. After considerable discussion of the purpose and objectives for this organization, a Constitution and Bylaws was formally adopted and the American College of Dentists came into existence.

Dr. C. N. Johnson, one of the organizers, in an address to the College the following year in Milwaukee, Wisconsin stated: "To create an incentive in our ranks which shall impel men to constant application along lines tending to the uplift of the profession is the very highest function which any body of men can undertake and thus every right thinking man should get behind this movement and help develop it to its fullest fruition.

"But let it not be thought that it is a simple matter to launch this craft or to steer it clear of obstacles in the early stages of its

^{*} Presented at the annual meeting of the American College of Dentists, New York, N.Y., October 12, 1969.

 $[\]dagger$ Past-President of the American College of Dentists and chairman of the 50th Anniversary Committee.

voyage. In some respects it is the most delicate mechanism that was ever conceived in the dental profession, and it is well that its founders should gain a very clear idea of its objects and the real function which it is intended to perform. It should not be considered merely as *one more society*. It is apart and distinct from every other organization in dentistry, and it should remain so. It is to be an institution to which every sincere, earnest and progressive man would wish to aspire, it must not be cheapened in any way. Better by far to be considered too exclusive than too promiscuous.

"Let us consider for a moment what the College is supposed to stand for. The object is to provide an incentive for men to apply themselves to the solution of various problems which confront the profession, to stimulate growth on the part of dentists, and to encourage them to reach out for the higher and better things of professional life—in short, to create a class of men in dentistry, who are not satisfied to stand still and be content with mediocrity, but who wish to consecrate themselves to the loftiest conception of all that is involved in the purest ideals of human relationship.

"In the broadest concept of what we propose to stand for, it behooves us at this time to study most carefully every move that is to be made in the initial stages of our organization. It is so easy to make mistakes and so difficult to remedy them."

The years have passed and the College has now been active for 49 years. Have the hopes and dreams of the four founders been realized and fulfilled? I would say that up to this time the College has, by and large, met the challenge of the early objectives and in its stalwart way, has been a tremendous force for the advancement of the profession and for service to humanity.

A Golden Anniversary celebration, commemorating fifty years of service to the profession is desirable for it will serve to review the history of the College and will give us an opportunity for renewal and possible expansion of the objectives. It should also serve to encourage each Fellow to renew his obligation of responsibility.

The American College of Dentists is looking forward to this occasion with anticipation, for it is truly a milestone of progress. Every member has a place in this Anniversary for it is due in part to the cooperation of each individual Fellow that the objectives of the College are operationally active. You are Fellows of the Col-

lege because of your distinguished professional achievements. Those being honored today with Fellowship should take to heart the words of Dr. Johnson and go on to greater achievements. These achievements should not be for personal gain or glory, but rather, they should be for the advancement of the profession and the welfare of humanity. Your responsibility becomes greater than ever as you take the Oath of Fidelity to the objectives of the College. Listen carefully to the provisions; never let it be said that you failed to comply with the provisions of this Oath.

WHAT HAS THE COLLEGE MEANT TO DENTISTRY?

Many problems have come and will continue to come before the dental profession that have been and are of real concern to responsible groups as well as to all serious thinking individuals. The College recognizes this fact and has endeavored to make its resources available to assist those responsible for decision making. In the farsightedness of its officers, boards and committees, the College has instituted research and reviews of various areas of dentistry. The results of such studies have become the initiating incentive for many actions.

For almost five decades the College has carried out its objectives. We find that most of the achievements have been directed toward the advancement of dentistry and the betterment of the dental health of people. The high purpose and sincerity of the studies has added to the stature of the College. Accordingly, pronouncements and recommendations of the College have had the stamp of authenticity, which is essential in any consideration of problems.

In his early presentation, Dr. Johnson mentioned three objectives for which the charter members believed the College should stand. First, "to provide an incentive for men to apply themselves to the solution of problems which confront the profession." At the time of the organization of the College there were many serious problems facing dentistry, one in particular related to dental education. These men felt that study and research was urgently needed in this area in order to make sound recommendations for advancement. Thus the first objective called for a service to the profession. It provided an incentive to men capable for such assignments. Such men would thus be eligible for the honor as Fellows of the College.

His second objective was: "to stimulate growth on the part of the dentists." In other words, the stimulation for continuing education. This objective has had the attention of the College during its total life and early considerations by the College led to an OUTLINE FOR A CONTINUING EDUCATION PROGRAM FOR THE DENTAL PROFESSION. The preface to the OUTLINE stated that professional men, in the field of health service must assume among others, two basic obligations:

1. to keep abreast of developments in their chosen field of service, so that patients will always be assured of the best of service; and

2. to share their knowledge and experience with their confreres in order to add to the accumulation of knowledge in the interest of service to the public and the advancement of the profession.

The third objective mentioned by Dr. Johnson was "to encourage them to reach out for the higher and better things of professional life." In other words, the development of dedicated and consecrated men, whose ideals and professional attitudes were directed to the service of humanity. The College has constantly stressed that a proper motivation, a correct professional attitude, high ethical ideals and professional performance of the highest order should be instilled in the dental student, who will become the dentist of tomorrow.

Since the initial organization, the objectives have been expanded and spelled out more clearly and the responsibilities for performance have become more demanding. Ten objectives of the College are currently outlined in the Constitution and Bylaws. These are indicative of the broad interest of the College in matters pertaining to oral health of the public, to the education of professional personnel, to research in the fields of science and social responsibility and the concomitant factors related to clinical practice. Through the efficient functioning of the Central Office during the past years, and the sincere efforts on the part of the committees of the College, it has been possible to aid in the solution of some problems facing the dental profession.

We are not the body politic, responsible for decisions that must be made nor for the policies that should be adopted, but as a group of dedicated professional men and women we do have responsibilities of aiding and supporting such decisions and policies. Further, as individuals we have a personal responsibility in the selection of those who are to represent us in all deliberations and in all administrative activities within the field of organized dentistry.

In assuming responsibilites for study and research within the realm of our objectives, the members of the College have been recognized as leaders in the profession. This recognition includes each Fellow of the College.

Leadership is our birthright and our objectives are a measure of our ideals and standards. Willard Fleming, in his inaugural address as President of the College in 1951, had this to say which bears repeating: "Leadership in the dental profession has characterized our actions, and expediency has rarely taken precedence over the principles of right action. In addition to leadership, the College serves the profession at times as a catalyzer to speed up certain actions and progressive development, and again as a governor to control too hasty action. One of its most important functions is to initiate and contribute throughtful studies of various problems through the action of its nationally constituted committees."

Now what is there to celebrate? Is it self praise of a fifty year organization? Is it to compliment the officers, the Boards of Regents and the committees, who have served the College most valiantly? Not entirely, but it is primarily for the purpose of celebrating the faithfulness of performance within the established objectives and the earnestness in their fulfillment.

I have not mentioned the many accomplishments and achievements of the College since 1920, and at this time I do not intend to make such a recitation. This we will do with all our fervor, strength and enthusiasm at the 50th Anniversary Celebration in Las Vegas next November. I assure you that we have reason to celebrate and I am certain that those who have served the College over the years in one capacity or another will agree with me. The officers, the Board of Regents and the Committee on the 50th Anniversary Celebration are looking forward to full participation by all Fellows. An invitation is hereby extended for your attendance and participation. Plans are quite well organized and they are deserving of your support.

Nineteen seventy should be considered a full year of celebrating. The first call is directed to the Sections of the College. We urge you to plan your programs or meetings for the year around the theme "Golden Anniversary."

Under the authorship of Dr. Otto Brandhorst, the history of the College will be completed and ready for distribution at the time of the celebration. The history has been in preparation for several years and should be a worthwhile contribution to dentistry and to the anniversary.

The celebration will cover two days of activities, November 7 and 8, 1970. On Saturday morning, November 7, there will be a series of philosophical presentations by the most knowledgable and outstanding speakers available.

The Past Is but a Prologue
 "The Beacon Light for Fifty Years"—a review of important past achievements of the College

2. A series of presentations under the title "The Future Is a Challenge," directed to the profession, to the individual dentist, to dental education, to dental research.

There will be a luncheon at noon at which time distinguished individuals will be recognized and honored. The luncheon will conclude with an historical sketch depicting the initial organization of the College in 1920.

The afternoon session will have two additional presentations:

- 1. "The Future—A Challenge to Society," and
- 2. "The Response to the Challenge."

This will complete the program of the day.

The format for the Sunday meeting will conform to previous annual sessions and will be directed by the President of the College.

Fifty years of action deserve recognition and each Fellow of the College should take pride in his organization "that is imbued with the highest ideals of a profession, and which lends its influence to every movement having for its purpose the advancement of professional objectives and the betterment of dental service to humanity."

Dentistry Today A Profession in Transition

At the Forty-ninth annual meeting of the American College of Dentists, six position papers were presented on the theme, "Dentistry Today—A Profession in Transition." These papers characterized the profession and its performance in meeting its oral health responsibilities, and described the dimensions of its service in terms of need, demand, cost-benefit and availability.

In this issue we publish the first three papers:

"The Professional Concept—Its History and Meaning to Health Service," by Dr. Maynard K. Hine.

"The Structures of Dentistry" by Dr. C. Gordon Watson.

"The Dental Diseases—Their Magnitude, Prevention and Treatment," by Dr. William E. Brown.

In the next issue the second group of papers will be published. These six papers will form the base for the program of the 1970 meeting. Under the general title of "Dentistry Tomorrow—The Future Is a Challenge," the program will make projections for change. These projections will speak of the necessity for renewal or revision of professional concepts and delivery methods as Dentistry adjusts to the changing socio-economic environment. It will also speak in a clear voice to the public, pointing out that it has responsibilities to support oral health programs in education, research, prevention and treatment.

The 1970 program could lead to a series of coordinated workshops to further the renewal and adjustment of the profession, and ultimately to the establishment of a means to review and evaluate progress toward achieving more effective oral health care.

The Professional Concept—Its History and Meaning to Health Service*

MAYNARD K. HINE, D.D.S., M.S., D.Sc.†

THE development of advanced professional concepts, and the steady growth of the professions guided by them, is a commendable characteristic of the modern world. The professions are more numerous, more beneficial and more influential now than ever before. Since the motives and the conduct of the members of the professions have a marked impact upon both the quality, quantity and the distribution of services given by the professionals, a discussion of professional codes of ethics and their significance in the delivery of health services seems in order.

According to Webster's Third Unabridged New International Dictionary, the pertinent definition of the word "profession" is "a calling requiring specialized knowledge and often long and intensive preparation including instruction in skills and methods as well as scientific, historical, or scholarly principles underlying such skills and methods, maintaining by force of organization or concerted opinion high standards of achievement and conduct and committing its members to continued study and the kind of work which has as its prime purpose the rendering of a public service."

A "professional" has been defined as one who is engaged in one of the learned professions, such as theology, law, medicine, health professions. Since the word is also used to describe individuals who participate for gain or livelihood in an activity often engaged in by amateurs, perhaps one should include a discussion of what is often called the oldest profession in the world. While this is not pertinent to a discussion of delivery of health care, one might argue it does have some relevance to moral codes and a discussion of health and delivery.

^{*} Presented at the annual meeting of the American College of Dentists, New York, N.Y., October 11, 1969.

[†] Chancellor Indiana University-Purdue University at Indianapolis.

A history of the development of professional concepts follows the history of man's developments of concepts of justice. It is tempting to discuss the historical aspects of this evolution in detail, for I found it to be most interesting, but a short summary should suffice. In the very early stages of the development of civilization, all individuals were interested in protecting themselves, and, to varying degrees, each other, from the unscrupulous. Many philosophers have discussed the emerging of man's moral conceptions; Kropotkin among others believed that first came a desire for help from his neighbors, then a willingness to aid his neighbors, next a longing for justice for themselves and gradually a willingness to accept justice for others, even at some sacrifice to themselves.1 (Very early in the history of thought, Aristotle (384-322 B.C.) gave much attention to the strange fact that man had an awareness that he "ought" or "ought not" to do this or that.) Consideration of exactly when and why people began to develop a conscience and a hope for justice for themselves and for all, leads one immediately into a study of religion. It is interesting to note that all of the world's major religions include some version of the basis for modern codes of ethics, namely, the well-known rule, "Do unto others as ye would have them do unto you" (Matt. 7:12, Luke 6:31).

ANCIENT CODES OF ETHICS

One of the earliest codes covering human behavior was that attributed to Hammurabi, King of Babylon about 2250 B.C. This code was really the law of the land, rather than a voluntary code of ethics, and consists of 282 short statements outlining how a man should act in relation to his colleagues. For example, "If a man steal a man's son who is a minor, he should be put to death." "If a man cut down a tree in a man's orchard without the consent of the owner of the orchard, he shall pay ½ mana of silver." Eight sections in this code refer to physicians' fees, and the punishment given one whose treatment fails. Incidentally, this code specified that the doctor's fee scale was to be graded according to the social standing of the patient. The 200th statement reads, "If a man knock out a tooth of a man of his own rank, they shall knock out his tooth." The 201st reads, "If one knock out a tooth of a free man, he shall pay ½ mana of silver." Similar statements are

made regarding damage to other parts of the body.

The similarity between some of the statements in the Hammurabi Code and the laws given the Israelites by Moses a few centuries later (1491 B.C.?), is also interesting.

For example, the Hammurabi Code includes the provision that "If a man destroy the eye of another man, they shall destroy his eye" (# 196); this can be compared with a statement in Exodus, "If any harm follows, then you shall give life for life, eye for eye, tooth for tooth, etc. (Ex. 21:23). Also, in both Hammurabi's Code and that of Moses, less severe penalties were assessed against a free man than a slave, although the difference is somewhat less in Exodus than in the older code.

The next noteworthy code written to guide the behavior of physicians was the well-known "heathen Oath" generally ascribed to Hippocrates. This code, written about 350 B.C. asked physicians to follow it voluntarily. Hippocrates was not only an observant physician, but a man of high moral and ethical standards, and the oath bearing his name expressed his opinions. A study of it shows that Hippocrates' interest was both in protecting those practicing medicine and those individuals who sought medical care. A modification of it is still widely used today by many medical schools at graduation time.

Many other ancient codes were developed by various groups of people or individuals. These were usually concerned primarily with legal matters and only incidentally with health affairs.

One code from India deserves mention. This is the Code of Manu, reportedly a noted Hindu physician, although his existence is challenged by some. The Code of Manu, which was compiled between 200 and 300 B.C., set up some strict regulations regarding physicians and their conduct, stating for example that they were not permitted to attend funerals. Incidentally, the Code of Manu includes this interesting comment: "Without practical training and merely by hearing lectures and by repetition of discourses, a pupil is like a donkey with a burden of sandalwood, for he knows its weight but not its value." This code, like many others, was in reality a series of instructions or commands for the practitioner and attempted to cover the minutia of man's actions in relation to his patients.

No discussion of the development of professional concepts would be complete without the mention of the contributions of Thomas Percival (1740-1804), an English physician who practiced in Manchester, England, in the 1790s. Many codes have been written since then but little measurable advancement has been made since his book was published. Percival insisted that all practitioners should be familiar with and follow a lofty code of ethics, which he was convinced had religious roots. His code consisted of a list of items not designed to control but rather to guide practitioners in their personal development.⁴ The principles underlying professional ethics written in Percival's book have remained basically unchanged for decades, although the interpretations have been modified many, many times by professional organizations.

PROFESSIONAL STATUS

In recent times, many vocations have been seeking the status of a profession. Insurance salesmen are trying to free themselves of the business label, and desire a professional status. They assume the attitude they are not selling insurance, but rather giving people expert and objective diagnoses of their risks and advising them how to protect themselves. Librarians want professional status and so they seek to make themselves experts on the effects of reading, in bibliography and reference, rather than be merely custodians and distributors of books. People in business management work at developing a science of management which could presumably be applied to any organization, no matter what its purpose. The social workers have proved that their activities could not be done by amateurs, since they deal with services requiring training in casework, techniques based on accumulated knowledge and experience of human nature in various circumstances and crises.⁵

The reasons for desiring to obtain professional status are readily apparent. Professionals demand and receive more independence, more recognition, a larger measure of autonomy in choosing colleagues and successors, and sometimes a better income, at least when compared to others in the same general type of endeavor. The public accepts the concept that some combination of scholastic aptitude, ambition and financial means is required to be-

come qualified to enter a profession, and that entrance into a profession requires attendance at a university. The public also expects the professional to accept more responsibility for the quality of his service than does the non-professional.

ATTRIBUTES OF PROFESSIONAL BEHAVIOR

It is generally agreed that modern professional behavior may be defined in terms of four essential attributes which must be predominant:

- 1. A high degree of generalized and systematic knowledge which is improving so rapidly that continuation education is required. This should result in better service to the individual served.
- 2. A primary orientation to the interest of others rather than individual's interest, based on the fact that those served often cannot judge the excellence of the service. This attribute, too, should result in better care for the individual served.
- 3. A high degree of self-control of behavior through codes of etiquette or ethics developed by the voluntary associations organized and operated by the professionals, and
- 4. A system of rewards (monetary and honorary) which help give the profession economic and social status.

A study of many modern codes of ethics indicates that all these essential attributes are usually included. They define a scale of professionalism; the mot professional behavior is that which realizes all four attributes in the fullest possible manner.*

However, I am convinced that the time is long past due to add a fifth attribute.

5. Assumption of the responsibility for developing methods of making the required services needed available to those who need them, regardless of nationality, race, color, creed, location, or economic status.

Modern Codes of Ethics

A short review of the codes of ethics approved by the official organizations of many of the professions indicates much similarity in their basic principles. A collection of codes of ethics of 133 occupations has been published⁷ but time permits a review of only five, medicine, nursing, optometry, law and dentistry. The various codes of ethics for those whose livelihood comes from religion were, surprisingly enough, vague and not at all strict.

Medical Ethics. The modern "principles of medical ethics"

^{*} Except for the fifth point mentioned, this discussion follows closely that of Bernard Barber in his article on "Some problems in the sociology of the professions."

which was adopted by the American Medical Association in 1957 consists of a short preamble and ten sections stating general principles intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

The Principles of Medical Ethics includes no specific statement regarding the physician's responsibility to make health care available to those who need it, although Section 10 states:

"The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community."

Ethics for Nurses. The nurse is rapidly upgrading her place in the health field from an occupation to that of a profession. Her duties require much more general education than formerly, and more special knowledge; as medical science advances, the physician must delegate more and more technical functions to the nurse, who in turn delegates some of her simpler functions to practical nurses, aides and maids. The nurse deserves—and demands—more independence, prestige, and salary, in keeping with her expanded duties.

The American Nurses Association's Committee on Ethical, Legal and Professional Standards prepared a document in 1968 which states that the nurse provides service with respect for the dignity of man, unrestricted by considerations of nationality, race, creed, color, or status. One of the points in this code spells out that the nurse works with members of the health professions and other citizens in promoting efforts to meet the health needs of the public.

An international code of ethics for nursing was adopted in Frankfurt, Germany, in June, 1965, spelling out 14 general principles to guide the conduct of nurses. Among other provisions, this code also reminds nurses that they must share responsibility with other citizens and other health professions in promoting efforts to meet the health needs of the local, state, national and international public.

Optometry Code. The American Optometric Association has also adopted a concise, yet comprehensive, code of ethics, consisting of a set of rules guiding the practice of optometry and a document spelling out the basic responsibilities of optometry, relations between an optometrist and his patients, the responsibilities to other optometrists and to the public, and the relations between an optometrist and other professionals.

The American Optometric Association approved this statement as part of their code: "It shall be the ideal, the resolve and the duty of the members of the American Optometric Association to see that no person shall lack for visual care regardless of his financial status."

Legal Code. As might be expected, the law profession has by far the most detailed and elaborate code of ethics. In 1967 the Committee on Professional Ethics of the American Bar Association published a book of 775 pages listing 44 canons of professional ethics and 36 canons of judicial ethics, along with formal and informal opinions of each. Although the code has been revised many times, a committee of the American Bar Association in August this year appointed a committee to revise it once again.

Of all the professional codes of ethics reviewed, the ethical considerations for the legal profession spelled out more exactly the lawyer's responsibility to make their services available to those who need them. Canon 1 states that a lawyer should assist in maintaining the integrity and competence of the legal profession, and includes the following comment:

"A basic tenet of the professional responsibility of lawyers is that every person in our society should have ready access to the independent professional services of a lawyer of integrity and competence." (Report of the special committee on evaluation of ethical standards, page 7, Code of Professional Responsibility, American Bar Association, 1969.)

However, the book includes this comment, "a wide gap separates the need for legal services and its satisfaction as numerous studies reveal. One reason for the gap is poverty and the consequent inability to pay fees. Another set of reasons is ignorance of the need for and the value of legal services and the ignorance of where to find a dependable lawyer. There is fear of the mysterious processes and delays of the law, and there is fear of over-reaching

and over-charging by lawyers, a fear stimulated by the occasional exposure of shysters."8

Substituting "dental" for "legal" and "dentist" for "lawyer" would make a pertinent quotation for dentistry.

DENTAL CODES OF ETHICS

Code for Dentistry. As one would expect, the development of dental ethics paralleled that of medical ethics, although lagging somewhat behind.

A campaign of self-policing began to take shape within the dental profession in the first half of the 19th century. One early spokesman for it was Solyman Brown, a physician and dentist, whose "Remarks on Professional Morality" appeared in 1839 in the newly-established *American Journal of Dental Science*. Besides describing the need for proper professional training, Brown defined his concept of the social responsibility of the dentist, and stated that the Golden Rule, which he called "the devine law of social benevolence" was the best guide to conduct. He also made specific reference to the dentist's duty to care for the poor.

For the most part, however, Brown directed himself to the problem of keeping unqualified practitioners out of dentistry. He noted that there were "almost a hundred individuals calling themselves Dentists in the City of New York alone" in 1839 and that "one of the results of this gross accession of numbers (is) that much professional incapacity and great moral delinquency of character, become thus connected with our calling."

As an example of the quacks and impostors whom he sought to expose, Brown described "the man who can wish to persuade the credulous multitude that he can extract the teeth of men, horses, and wild boars, without pain or effort, by the simple use of a rusty jack-knife or a two-penny whistle."

To combat this sort of thing, Brown said: "It is our duty, as good citizens, to labor *collectively*, as well as individually, for the elevation of our profession in character and in usefulness."

On the subject of collective action, a few local dental societies were formed in the 1830's, and in 1840 the American Society of Dental Surgeons came into being, with Solyman Brown as one of the founders. Its announced purpose was "to run a clear line of discrimination between the man of competent attainment and the impudent empiric."

The first official code of ethics for dentistry was adopted by the American Dental Association in 1866. It contained four sections: "The Duties of the Profession to Their Patients," "Maintaining Professional Character," "The Relative Duties of Dentists and Physicians," and "The Mutual Duties of the Profession and the Public." There were clear echoes of the Percival approach in this code, since the main drift in all but the first of these sections was a spelling-out of proper professional relationships within dentistry and between the professions of medicine and dentistry. The matter of social responsibility was considered only briefly and in very general terms.

In fact, the language of the last section of the code suggests a rather cavalier attitude toward the public. It reads:

Dentists are frequent witnesses, and, at the same time, the best judges of the impositions perpetrated by quacks, and it is their duty to enlighten and warn the public in regard to them. For this, and the many other benefits conferred by the competent and honorable dentist, the profession is entitled to the confidence and respect of the public, who should always discriminate in favor of the true man of science and integrity, against the empiric and impostor. The public has no right to tax the time and talents of the profession in examinations, prescriptions, or in any way without proper remuneration.

The first of what might be called the modern codes of dental ethics was approved by the American Dental Association in Los Angeles in 1922. Five of its seven sections specified various forbidden acts, such as fee splitting and disparaging the services of a colleague. One of the two remaining sections advocated the philosophy of the Golden Rule and the other said that "the dentist should be morally, mentally, and physically clean." Again, there were no specific provisions governing the social responsibility of the dentist.

By 1934 the code of ethics of the American Dental Association had grown to 12 sections, and something very close to the present code with its 21 sections, was adopted in 1950. Significantly, these later versions stated that the individual dentist is responsible for keeping up with educational advances in his profession and that under certain circumstances "he may properly participate in a program for the education of the public on matters pertaining to dentistry. . . ."

Perhaps because of personal bias, it seems to me that the Principles of Ethics of the American Dental Association are the most

succinctly stated and comprehensive of all those studied.* However, the dental code is actually a code of etiquette, since it is primarily concerned with the conduct of dentists toward each other, toward members of the health teams, and toward patients. By definition etiquette includes rules of conduct prescribed by custom while ethics deals with what is good or bad, right or wrong, and with moral duties and moral obligations. Customarily, codes of ethics include codes of etiquette, but should go beyond rules of conduct.

The characteristics of the dental profession as stated by the Judicial Council in its official advisory opinion revised in June 1967, are similar to the attributes of a profession referred to earlier. They are:

- 1. The provision of a service (usually personal) which is essential to the health and well-being of society.
- 2. The necessity of intensive education and training to qualify its members as competent to provide the essential service.
- 3. The need for continuing education and training to maintain and improve professional knowledge and skills.
- The need for the joining of professional colleagues in organized efforts to share new knowledge and new developments of professional practice.
- 5. Dedication to service rather than to gain or profit from service.

No comment is made either in the Principles of Ethics or in the Judicial Council's official advisory opinion regarding the responsibility of the dental profession of making health care available to those who need it.

TEACHING OF DENTAL ETHICS

Every thoughtful dental teacher is eager to have his pupils develop into knowledgeable citizens who contribute to the building of a better community as well as develop into competent ethical practitioners of dentistry and a desire to help advance the profession. How can this be assured? Dr. Lovett, lecturer in ethics in Baltimore College of Dental Surgery, divided the ethical development of a dentist into three stages.

The first stage, from childhood to graduation, is characterized by a theoretical idealism instilled by the home, the school and the church, but untested by the tremendous forces of the world of business.

^{*} Latest revision was published in January 1969.

In the second stage, during the first few years of practice, the young dentist's idealism is put to a most severe test because of terrific economic pressures, or the fear of financial problems. I have noted this stage beginning in the clinical years in dental school. It is in this stage that his whole future ethical development is at stake.

The third stage, professional maturity, is characterized by a blending of youthful idealism and practical experience. Usually by this time the dentist has established his practice and acquired the professional attitude which will guide him throughout his professional career.¹⁰

Please note that the first stage includes years before the individual begins to study for his profession. Such qualities as intellectual honesty, a desire to achieve perfection rather than settle for mediocrity, a sense of social responsibility, cannot be taught in dental school. True, these essential attributes to ethical behavior can be reinforced and perhaps activated, but the basic ethical qualities of a practitioner are present long before the student can be given a course in dental ethics. This places heavy responsibilities upon the admissions committees of dental schools.

DISCUSSION

Advances in the health sciences make it necessary to add new dimensions to codes of ethics. For example, it is possible in this day and age to transplant, replant, or implant, substitutes for all parts of the body excepting the brain, and the computer is rapidly replacing that! Additions to the code of ethics may well include a new definition for death and new guidelines for the selection of both donors and recipients of various organs of the body.

Greater activity in clinical research makes it necessary to consider the code of ethics in a new light. For example, whenever a promising new life-saving drug or technique is developed, for a period of time someone must test it on patients, and decide who will receive the treatment. I served on a committee years ago to help draw up guidelines to determine who would be favored with the use of sulfanilamide when it was in short supply, and it wasn't an easy assignment. The same situation arose with penicillin; decisions had to be made to allow one patient to receive the drug

and perhaps survive, but because of the limited supply, deny the drug to another. At the present time it is a difficult decision to decide who with Parkinson's disease should receive the benefits of the highly complex and costly treatment using the medicament, L-Dopa. These are ethical questions that deserve the careful attention of the medical profession.

The health professions have long faced problems associated with keeping alive people who have almost no chance for survival. In dentistry one sometimes wonders how desirable it is for dental patients to be subjected to hours of costly and unpleasant dental treatments demanding endodontic therapy, gingivectomies, and full mouth reconstruction on teeth doomed to remain only minimally functional for only a few months!

Obviously there are indisputable arguments in favor of clinical research and complex methods of therapy. Advances in the health sciences would be slow or impossible to establish if no pioneering is done. Nevertheless, the ultimate benefit of the patient who is to receive as yet unproved procedures must be considered very carefully, particularly if the treatment is costly to the patient.

The pattern of a dental practice has changed greatly in the last decade and will almost certainly continue to do so. Group practices, hospital dentistry, and an increased number of dental specialists are gradually replacing the individual dentist caring for all the patients' needs while working alone in his private office. As a result, changes may be indicated in the code of ethics that guides the dental profession. For example, who is to take the final responsibility for the care of a patient whose dental treatments are being performed by three or four specialists?

A study of the professional concepts of those practicing in the health fields indicates that there have been slow but desirable changes in the last few decades. These changes have generally resulted in an improvement in the quality of health care. The codes of the professions are still rightly concerned with protecting members from other practitioners and from threatening non-professional forces, but in addition, the profession's concept of their responsibility is broadening to guaranteeing quality care to those who need it.

There has been an increasing interest in all the professions in keeping their services up to date and extending their service to those who need it. Leaders in organized dentistry have started to seek and support methods of extending dental care to areas and groups of individuals where it is needed but not available. It seems to me the time has come to add to the code of ethics of the American Dental Association a section 22, stating something like this:

"It shall be a goal of organized dentistry and its individual members to devise methods of motivating all individuals to desire oral health and of making minimal dental care available to all those who need it, regardless of nationality, race, color, creed, location or economic status. The profession and the individual dentist should not be expected to bear the total cost of this minimal dental care but rather should develop plans under which the individual, assisted in the case of the indigent by the community, state or federal government, can receive needed oral health care."

Adoption and implementation of this addition to the dental code of ethics would have many far-reaching consequences. It would, of course, improve the oral health of those who now have no access to dental care. It would require developing a much more efficient system of health care than is now available, since it is generally recognized that needs for dental care far exceed the ability of the dental profession to care for them, using current methods. It would require some increase in the number of dentists and hygienists, but more importantly, wider use of auxiliaries. It would require better application of preventive procedures to be built into a comprehensive program for the delivery of health care. It would require better distribution of dentists, better methods of continuation education, and more effective dental health education. Probably it would require state or federal funds to finance certain aspects of such a program, hopefully under the general direction of organized dentistry. And it would require use of more effective methods of motivating patients to want dental health.

One must remember that it is well established that in the long run an individual cannot be helped by doing something for him that he could do himself. Nevertheless, if we dentists really believe dental health is essential, we must take the responsibility for motivating the individual to seek dental care, and make it possible for him to receive at least minimal dental care. If dentistry can accomplish this dual charge, there will be a striking improvement in the oral health of the public.

SUMMARY

Starting from a period where individuals with little or no training, poor materials and inadequate technics, yet working alone, and sharing their "tricks of the trade" with no one, dentistry has developed into a well-respected health profession in the finest sense of the word.

In the last century dentistry has earned the distinction of being classed as a health profession. Better service to the public served by dentistry has resulted, along with an improved economic and social status for the dentist. Unfortunately, there are many deficiencies and gaps in the delivery of dental care, and it behooves the dental profession to lessen the deficiencies and close the gaps. The modern concept of professions includes the idea that one of their goals is to make its services available. This responsibility is only partially being met at this time by dentistry. The dental code of ethics should be amended to guide dental practitioners toward fulfilling this goal. However, no code of ethics can ever be written, much less enforced, which can guarantee that all dental practitioners will consistently conduct themselves and their practices in a manner best for the public. In the last analysis, individuals selected for the dental profession and allowed to remain in it should have highly developed professional concepts, and thus need not be controlled by a strict and detailed code of ethics.

Study of the code of ethics of the American Dental Association reveals that no statement is made regarding the dentist's responsibility toward making dental care available. However, at the meeting of the House of Delegates of the American Dental Association in October 1969, the House did approve a resolution which will "eliminate forever the denial of treatment by the dental profession to any person on the basis of race, color, creed or national origin."

Resolved, that Section 2 of the Principles of Ethics be amended by adding the following to the first paragraph of Section 2:

In serving the public, a dentist may exercise reasonable discretion in selecting patients for his practice. However, a dentist may not refuse to

accept a patient into his practice or deny dental service to a patient solely because of the patient's race, creed, color or national origin.

to make the amended Section read as follows:

Section 2. Service to the Public. The dentist has a right to win for himself those things which give him and his family the ability to take their proper place in the community which he serves, but there is no alternative for the professional man in that he must place first his service to the public. In serving the public, a dentist may exercise reasonable discretion in selecting patients for his practice. However, a dentist may not refuse to accept a patient into his practice or deny dental service to a patient solely because of the patient's race, creed, color or national origin.

The dentist's primary duty of serving the public is discharged by giving the highest type of service of which he is capable and by avoiding any conduct which leads to a lowering of esteem of the profession of which he is a

member."

This resolution should encourage practicing dentists to meet their obligations. However, it seems desirable that an additional section should be added to the code of ethics which spells out the desirability of developing and implementing plans for making at least minimal dental care available to all who need it. It is now generally believed that health care is a right rather than a privilege, and if the dental profession will take the lead in making this care available, the oral health of the public should be improved without a complete disruption of the excellent system of dental care which has been developed in this country.

Dr. John Gurley once quoted an anonymous poet who gave this advice:

"The eye's a better pupil and more willing than the ear; Fine counsel is confusing, but example's always clear. I can soon learn how to do it if you'll let me see it done. I can watch your hands in action but your tongue too fast may run. And the lectures you deliver may be very wise and true, But I'd rather get my lesson by observing what you do. For I may misunderstand you and the high advice you give, But there's no misunderstanding how you act and how you live."

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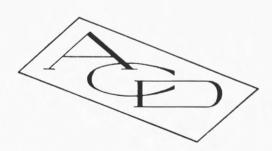
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The Dental Diseases—Their Magnitude, Prevention, and Treatment*

WILLIAM E. BROWN, D.D.S., M.S.†

A MERICAN dentistry has the scientific knowledge and the technical skills to maintain the natural teeth of most people for a lifetime. Given the desire, the necessary finances, and the accessibility of professional care every American citizen could conceivably enjoy good dental health from birth to death. Yet, the dental health of our people is not exceptionally good, and the promise of significant improvement in the near future is obscure. Official agencies estimate that about 45 per cent of our population visits the dentist at least once a year, for whatever reason. Casual estimates indicate that only 20 per cent receive optimal, continuing care. It is the purpose of this report to review the reasons for the gap and some of the ways to bridge it.

MAGNITUDE OF THE PROBLEMS

According to the U.S. Bureau of the Census in 1966, the preschool population will increase by 1985 from the present 24.5 million to about 36 million and the school-age population by almost 30 per cent from the present 49.5 million. The total number of children under age 19 will increase from 74 million to about 98 million by 1985.

According to the data used in preparing the American Dental Association's Dental Health Program for Children (1966), about 50 per cent of children by age two have decayed teeth, and the average child has three decayed teeth on entering school. By age 15, the average child has 11 teeth decayed, missing, or restored, and the average Selective Service recruit has three missing and

^{*} Presented at the annual meeting of the American College of Dentists, New York, New York, October 11, 1969.

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seven decayed teeth. Children born and raised in fluoridated areas have about 60 per cent fewer cavities.¹

Various studies indicate that about 50 per cent of children would benefit from orthodontic treatment, and casual estimates indicate that 25 per cent are in serious need of comprehensive care.

A variety of crippling anomalies occur in a significant portion of the population. Cleft palate, with or without cleft lip, occurs once in every 700 births. Hypoplasias of enamel and dentin are present in about 5 per cent of children and require extensive and expensive treatment if function and appearance are to be restored. Tetracycline staining has posed a serious problem, and in spite of educational efforts it still crops up too often.

Gingivitis occurs in a major portion of the child population, and this condition can lead to progressive periodontal disease. Periodontal disease is present in almost all adults in some form, and after age 40 it is the dominating reason for extractions. At age 50 about half of all teeth have been lost, and at age 60 fewer than one-fourth of teeth are preserved.²

Oral cancer comprises about 5 per cent of all cancers, and the difficulties of treatment and the sequelae are well known.

SIGNIFICANCE OF DENTAL DISEASES

To many people good dental health is not important. Many believe that complete dentures are inevitable and that once they are the proud possessors of these appliances their troubles will be over. Nothing could be further from the truth. The mass media helps perpetuate the myth, and unhappily some dentists do their part. In truth, the profession has not done nearly enough to advertise the significance of dental diseases nor has it done much to motivate people to seek the care they need. Let us then explore the consequences of diseases of the oral structures.

1. Dental Caries

The total number of carious lesions in a population group is a figure with little meaning. In fact, cavities mean little unless they result in pain, infection, disfigurement, or loss of teeth. With our present skills, pain and infection can be handled with relative ease, and the effects are generally short-lived. Disfigurement, however, from an unsightly cavity in an anterior tooth or the loss of a

tooth can result in impairment in the pursuit of one's education, employment, or social relations. Such disfigurement often does alter one's entire life. A teen-ager's dental impairment could result in dropping out or giving up or failing to make use of potential. These sequelae are difficult to measure, but they are real, complex, and significant.

The premature loss of a primary tooth can lead to arch space deficiencies and serious malocclusions. A high percentage of preschoolers who lose a second primary molar can be assured of complex malocclusions. So often these children cannot secure proper treatment, and their dentitions are ruined before the first permanent tooth erupts.

2. Malocclusion

Ideal occlusion is not necessarily a requisite for the good life. Many malocclusions, however, impair function, can lead to temporomandibular joint problems, and are seriously disfiguring. The esthetic deficiencies can alter personality and lead to educational, employment, and social problems. The profession should not be timid about emphasizing the importance of good esthetics as many malocclusions can be just as crippling as a deformed limb.

3. Anomalies

A glance at a child with amelogenesis imperfecta, dentinogenesis imperfecta, or severe tetracycline staining should convince even the casual observer that the child's life will be seriously disturbed without proper treatment. And the treatment is complicated and costly. Michigan's Crippled Children's Commission now provides funds for the dental treatment of these children.

4. Periodontal Disease

Periodontal disease does not usually cause discomfort before entering the terminal stages. Its real significance lies in its ultimate consequences, the loss of teeth. However, it is not quite that simple. Gingivitis in children is usually reversible if proper treatment is instituted. If neglected it may progress, and a complete return to normal, even with adequate treatment, is just not possible. Hence, in order to maintain teeth for a lifetime one must accept a special regimen of continuing care, to which many will just not subscribe. The significance of early prevention cannot be underestimated.

PREVENTION AND CONTROL

Most would agree that the long range objectives of the profession are to maintain natural teeth for a lifetime in acceptable function and with reasonable appearance. This can be accomplished for individual patients already, but not enough people become patients. The real problem then concerns ways to get more people to a state of optimal dental health by preventing those problems which are preventable and by treating those problems which are treatable. Dental caries can be managed universally, either by prevention or treatment. Some malocclusions can be prevented; most can be treated. Few anomalies can be prevented; most can be treated. Severe periodontal disease usually can be prevented; what cannot be prevented is usually treatable. Some oral cancers can be prevented; early detection will cure many. What systems can be developed, then, which will maximize the knowledge and abilities that we possess?

FOCUS ON CHILDREN

The American Dental Association's Dental Health Program for Children is the proper approach to a comprehensive program of prevention and control. Without a systematic approach the profession cannot hope to alter the course of dental health significantly. The program calls for a system of comprehensive dental care, starting with a young age group and adding additional age groups as rapidly as experience and resources permit. The congress passed legislation in 1967 which calls for a pilot program to test such a proposal; funds, however, have not been appropriated. The program would be the start of an effort to mobilize the nation's resources to develop a system of public education, motivation, and prevention—combining the efforts of the private and the public sectors. Public funds for treatment would be provided only for the indigent segment of the population. The patient oriented part of the program would include the full range of preventive measures, comprehensive treatment, and sound dental health education. That the project has not already commenced is testimony to the lack of concern on the part of the public for the value of good dental health.

Even when interest and funding reach the point at which a pilot program is initiated, one is justified in questioning just how a

community wide system could be developed. At a recent weekend brain storming session conducted by the Michigan Dental Association the participants took a hard look at dental programs conducted through the public schools. They reviewed the school programs in operation in New Zealand and the Scandinavian countries and examined the pros and cons of school programs that might be instituted in the United States. The pros included: (1) accessibilty of children, (2) improvement in dental health of children because more will get care, (3) more opportunities for dental health education and motivation, (4) easier scheduling and recall systems, (5) little or no wasted time on the part of the dentist, (6) the importance of dental health will rub off on parents and the school staff, (7) less disruption to the school program than the private practice method, (8) visibility of the dental facility, (9) permits private practitioner to do more challenging things, (10) high public acceptance a likelihood, (11) it provides a role for dentists who do not like private practice, (12) side benefits—better school lunches, mouth protectors, (13) equal opportunity for care, and (14) good center for collection of data.

The disadvantages included: (1) the program does not indicate the concept of self-responsibility—no model for future care, (2) interrupts school program and schedule, (3) takes physical space that could be used for other things, (4) high initial cost to establish facility, (5) staffing problems, (6) doesn't really solve manpower problems, (7) appointment scheduling is tied to school hours, bus schedules, summer closing of schools, (8) patient-dentist relations might be less effective, (9) subject to whims of funding agency—constant competition for funds, (10) will not reach children not in school, (11) mobility of population would interfere with continuity of care, and (12) might undercut parental responsibility.

The participants agreed that the issue of school-based dental programs should be opened wide and debated freely. They recommended that when money becomes available for children's dental health programs, Michigan should develop a grant request that would include a school dental program.

MANPOWER—NUMBERS AND ATTITUDES

The profession has begun to take stock of its manpower needs for the next 10 to 25 years, and many agencies, both professional

and public, have taken positive steps to prepare for the years ahead. The Michigan Dental Association, for example, has determined that it wants a new auxiliary, who will have many additional functions to perform in the area of restorative dentistry. She will be formally educated and be regulated by the state board of dentistry. Plans are underway to prepare the necessary amendments to the dental practice act. This new person will relieve the dentist of various tedious technical tasks, save him time, and permit him to do more of the comprehensive and challenging things that his education has prepared him to do and thus enable him to expand his services.

Although there are differing opinions on the need for a new auxiliary and her responsibilities, it appears that the profession is ready to make positive and far-reaching moves. Most dental graduates of the past five years have learned the values of chair-side assistants through Dental Assistants Utilization programs. Their practices have been planned to maximize the use of these auxiliaries. They are not hamstrung by the old concept that to be a real dentist one must do all things himself. They are frustrated by a law which prevents them from using auxiliaries in ways which would provide more and better service. For example, it seems illogical to them to allow an untrained person to secure radiographs and not be permitted to apply preventive agents topically or place rubber dams.

The new dentist is aware that there is much more to his practice than filling cavities and replacing missing teeth. He is aware that complete diagnosis and meticulous treatment planning, the full range of preventive services, and total patient care fall within his abilities. Yet, far too few dentists practice to the full limit of their potential. The blocks to an ideal practice are difficult to identify, but they include most certainly conflicting attitudes of teachers, professional colleagues, and the public.

The new dentist is more aware of his social responsibilities. He knows that dentistry should be available to all people and not just the financially able. Yet he is concerned that federal programs to provide care for the poor will deprive him of his individuality and control his activities. He knows that group practice is a logical step ahead, but he is not yet willing to give up the concept of solo practice. He knows that he should listen to the voice of the con-

sumer, but he is fearful that this may interfere with his professional prerogatives. Which way then to go?

Years ago, the profession set forth as its principle objective—high quality dental care for all people. Practically this objective is unobtainable, and some say why worry about it. In truth, however, most dentists do worry about it and wish to strive for it. But the road to the end of the rainbow is so long and tortuous that the proper way to travel is almost beyond comprehension. The philosopher would probably recommend that each curve be negotiated carefully and that side roads be taken when the main highway doesn't really lead anywhere. The profession has the tools and is developing the appropriate attitudes to approach its ultimate goal. Courage and an open mind will make the road a good deal straighter.

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The Structures of Dentistry*

C. GORDON WATSON, D.D.S.

In prefacing his book on *Leadership*¹ Sterling Sill calls attention to the importance of "laws" in planning leadership responsibilities. He says, "There is a child's book entitled *The Chance World*. It pictures a world in which everything happens by chance. The sun may come up in the morning or it may not. If you jump up into the air you may come down or you may keep on going. If water runs out to the edge of a cliff it may fall down or it may fall up. If you plant your field with wheat you will have no way to determine in advance whether or not it will grow, but if it does come up it may be wheat or it may be barley or it may be asparagus or rosebushes or apple trees, and there is no way to tell which in advance.

"One of the most fortunate things about our world," Mr. Sill observes, "is that it is not a chance world. It is a world of law and order. The operation of its laws may be predicted in advance. . . . The wise man learns to understand these laws. Then he may be able not only to predict events in advance, but he will know how to bring about the desired result. By means of this scientific prophecy, he may cause or prevent specific events."

"This ability to foretell consequences," concludes Sill, "gives one a tremendous natural advantage in any work he may undertake."

Now our business this morning is to determine the position of "dentistry today." My assignment is to summarize the organizational structure of the dental profession, highlighting its literature, education, research, licensure, specialties and component groups.

If our attention can be focused on the profession's structure and program, in light of current health laws and the public's desire for improved health delivery systems, then we will emulate the wise man who attempts to understand the laws so that he may

^{*} Presented at the annual meeting of the American College of Dentists, New York, New York, October 11, 1969.

predict events in advance and bring about a result beneficial to all parties.

It is my opinion that we have enough information to permit us to foretell the direction of the national health programs. Having this information and utilizing it in our planning will allow us to obtain a natural advantage and fulfill our obligation to society and the profession.

The best planning is accomplished with a definite objective in view. For example, an athlete can jump higher if he lays a bamboo pole horizontally across measured uprights and then tries to jump over it, then if he merely jumps up in the air. It is impossible to increase efficiency without some accurate measurement of progress made. Progress should be regularly checked, timed, measured and counted.

For a base-line or an imaginary pole across measured uprights, six assigned "structures" of dentistry will be outlined in this paper. Of necessity, the comments will not be comprehensive. But it is hoped that the information will be adequate to permit evaluation of organized dentistry's current status and allow the intelligent setting of objectives for proper guidance of a profession in transition.

LITERATURE—CUSTODY OF DENTAL KNOWLEDGE

In Gardner P. H. Foley's article on "Advances in Dental Literature" in the June 1950 issue of the *ADA Journal*, he stated that "the periodical literature of a profession indicates its contemporary interests more than do its books." A check of the periodical literature bears this out.

During the early years of organized dentistry, one of the major aims of periodical literature was to build the profession and to bring about a cohesiveness in its organization. Other functions of the early journals were education of the dentist and serving as custodians of proceedings and records.

Gradually, proceedings and records were delegated to Transactions and dental journals concentrated on contributing to the knowledge of the dentist.

Since federal dental research funds have been available, more emphasis in dental journals has been given to research. Journals provide the background information necessary for the researcher and they record and interpret the results of his research. Abstract journals were developed to aid the researcher and the practitioner.

More recently, the social consciousness of the profession has been evident in dental journals. They deal with dental education, legislation, methods of providing dental care, programs for the underprivileged and all national issues which affect the profession. Most scientific articles are published by national and specialty journals—a few by state journals. But attention is given at all levels—national, state, local, specialty, even commercial journals—to the issues before the profession. They have taken on a new responsibility of guiding the future of the profession. Emphasis now is on *communication*—communication between the dental society and its members, the editor and his readers.

Dental Publications: According to a survey made by the American College of Dentists, there were 132 dental periodicals in 1931 and 188 in 1959. However, in the next ten years—to 1969—the total has increased to 445 publications, that has been ten years from 188 to 445; the addition of 257 publications in ten years. The 1969 figure is broken down as follows:

- 8 ADA publications
- 71 Constituent dental society publications
- 155 Component dental society publications
- 11 Local dental society publications
- 58 Dental specialty publications
- 62 Auxiliary publications
- 5 Fraternity publications
- 18 Alumni publications
- 29 Dental school publications
- 19 Independent or commercial publications
- 9 Canadian publications

445 Total

Of the eight ADA publications four are journals and four are newsletters or news bulletins. The only two truly dental abstract journals published in this country are those published by the ADA—Dental Abstracts and Oral Research Abstracts. Forty-one constituent societies publish journals, 21 of the 41 states publishing journals also publish newsletters and nine states publish newsletters only. All state dental societies (plus the District of

Columbia and Puerto Rico) have dental publications except Montana and Wyoming.

Two hundred and twenty-two dental books were published in 1968 according to the *Index to Dental Literature*. This is an increase of 92 over the 130 dental books published in 1964.

Of the 222 dental books published last year 122 were in English and 100 in other languages. Thirty-nine of the total were English textbooks while 32 were textbooks published in other languages.

In the immediate future, emphasis must be on keeping the members informed on the issues affecting dentistry. A current need is improvement in the quality of writing and the ability to communicate—from the standpoint of both authors and editors.

EDUCATION—THE DISSEMINATION OF KNOWLEDGE

Since the end of World War II, there has been a rapid growth of institutions of higher learning in an attempt to meet the almost insatiable demands for advanced and specialty education. Income from tuition and state support coupled with endowment earnings has fallen drastically short of meeting the financial requirements of virtually all universities, colleges and vocational schools. Assistance has been required to support new building programs, expansion and remodeling of existing facilities, research, teacher training, faculty enrichment and student scholarship and loans.

The prime source of these funds has been the federal government. Dentistry has been successful in getting its share of these funds and the resulting growth of new and expanded schools to educate dentists and auxiliary personnel has been impressive.

As gratifying as this growth has been, it is apparent that with the many factors at work which tend to increase the demand for more dental care, renewed efforts must be made to expand the education and training of dentists and its allied professional personnel. A few comments may be in order regarding the status of dental education in the United States as we near the end of the sixties.

Dental Schools: There are a total of 59 existing and developing dental schools in the United States. Of these, 53 are in operation. Four of the 53 schools are in the developing stage and two are

phasing out their dental education program. The four operating schools still in the developing stage are: the University of Connecticut, the Medical College of Georgia, Louisiana State University and the Medical University of South Carolina. The two institutions phasing out their dental curricula are: St. Louis University and Loyola University of New Orleans which will graduate their last classes in 1971.

Other developing dental schools in addition to those mentioned above and the year of first enrollment are: Southern Illinois University (1970), University of Florida (1971), University of Colorado (1972), State University of New York at Stony Brook (1972), University of Oklahoma (1973) and the University of Texas at San Antonio (unscheduled).

It's interesting to note that 25 of the 59 dental schools, both operating and developing, are private schools as are the two now phasing out. Ironically, all of the new or developing schools are in state supported institutions.

In the 1968-69 academic year, 15,408 students were enrolled in the operating dental schools. Of this number, 4,203 were freshmen, 4,011 sophomores, 3,719 juniors and 3,475 seniors. During 1968, 10,001 candidates took the ADA Dental Aptitude Test—more than double the number of students enrolled in the freshman class.

Dental Hygiene: Seventy-two dental hygiene schools are currently accredited by the Association's Council on Dental Education. Thirty-one programs are within dental schools and 41 are operating outside the dental school setting. In addition 16 new programs are underway with students in classes which have not as yet been accredited. Only three of these are in dental schools.

Of the 88 dental hygiene schools in operation only 18 are privately sponsored programs. A bright spot in this picture is the fact that an estimated 24 dental hygiene schools are in various forms of development.

The total number of dental hygiene students enrolled in the 1968-69 academic year was 5,187. There were 2,624 in the first year, 1,876 in the second year, 358 in the third year and 329 in the fourth year. These figures reflect the heavy emphasis on a two-year curriculum as well as the growth of junior college programs outside the dental school scene.

Dental Assistants: There are 151 accredited dental assisting

schools in the United States only ten of which are in dental schools. All but eight are public supported programs. Twenty new programs are in various stages of development. During the past academic year 3,626 dental assistant students were enrolled in accredited programs.

Dental Laboratory Technology: Twenty-two dental laboratory technology schools are accredited by the Council on Dental Education; all but one are apart from dental schools. Also, only one technology program is under private sponsorship. It is estimated that five new programs are developing. In 1968-69, 462 technology students were enrolled in the first year.

Curriculum: As a result of a 1967-68 Annual Survey of Dental Educational Institutions conducted by the Council on Dental Education and the American Association of Dental Schools, several interesting facts about clock hours devoted to various areas of instruction were obtained. According to the survey, 27 per cent of the total teaching hours in dental schools is devoted to lectures, about 34 per cent to laboratory instruction and more than 36 per cent to clinical teaching.

In these categories of instruction, the number of hours devoted to lectures varies from 954 in one school to more than 1,500 in another. The laboratory hours vary from 995 to more than 2,100 and clinical teaching shows a range from 760 to over 2,600. Although some of this variance may be attributable to difference in classifying the several kinds of instruction, nevertheless, the survey does show a tremendous variation among the schools in terms of the relative time given to lecture, laboratory and clinical instruction. It also indicates that there has not been a significant change in the time devoted to particular subject areas since 1934.

There is, however, an increasing number of dental schools which are considering the development of a core curriculum and a major revision of the clinical sciences. In most instances, this change will increase the length of the academic year and will free the fourth year in order that students may pursue elective study.

On the basis of this kind of information, it is difficult to judge whether the proposed curriculum will be more effective in producing a competent practitioner, but it does appear certain that curriculum trends of this kind will have a significant impact on dental education as well as on the entire field of specialty practice.

Continuing Education: For the past three years, the House of

Delegates has considered reports related to the responsibilities which the profession has to assure the continuing education of dental practitioners. Finally in 1968, the House of Delegates adopted the following resolution:

"Resolved, That constitutent dental societies, in consultation with state boards of dentistry, are urged to develop mechanisms to foster the continued education of dentists licensed in their jurisdiction."

During discussion of continuing education at the 1968 Reference Committee hearing and House session, there was repeated reference to the desirability of incorporating in the *Bylaws* of constituent dental societies a requirement of continuing education for the maintenance of membership. As a result of these discussions, the House adopted a resolution which directed that an appropriate agency of the Association study the feasibility of amending the *Bylaws* to permit constituent societies to require reasonable standards of continuing education for the maintenance of membership. The Council on Dental Education has responded to this resolution and has submitted a proposal to the 1969 House of Delegates which if adopted would amend the *Bylaws* to permit constituent societies to establish mandatory continuing education standards for practicing dentists.

To say that we have reached a consensus on mandatory continuing education would, I believe, be inaccurate. An opposite point of view supports the proposition that the public's welfare is the principal objective of continuing education and that if a mandatory regulation is instituted it should be through state boards so that all licensed dentists would be affected by the requirement rather than only dentists who hold membership in the constituent societies.

Regardless of the outcome of this debate, constituent societies should plan to play a significant role in continuing education. Their role could include the sponsorship and accreditation of courses as well as recording and certifying completed requirements to dental boards.

The American Dental Association will, of course, offer its facilities and "know-how" in developing successful programs which will be of assistance to component and constituent societies. For example, the Council on Dental Education has begun the accumulation of reference material from educational institutions and constituent dental societies with the hope that a summary description of effective programs now in operation might be useful to societies which are just now developing plans for continuing education programs. Consideration is also being given to developing a "national faculty" with information on when these individuals might be available to offer programs, how they can be scheduled, their particular fields of expertise and other information.

Currently, the Council on Dental Education publishes a listing of continuing education courses in the *ADA Journal* each September, January, and May. The September, 1969 issue included 545 courses to be given during the months of October through January, 1970. When this figure is compared to a total of 1,232 courses listed for the previous year, it can be estimated that the number of courses to be listed during the coming year could be increased by 30 per cent. Of the 545 courses to be included in the September issue, 414 will be conducted by dental schools.

Accreditation: The American Dental Association's accreditation program dates back to 1938, at which time the Council on Dental Education was established and authorized by the Association to undertake a program of accreditation of dental schools. Standards for accreditation were adopted in the early forties and although the Requirements for the Approval of a Dental School have undergone several revisions since their adoption many of the basic concepts and principles are still valid today.

Initially, the accrediting activities were confined to dental schools but today, in a parallel course with the development and growth of the profession, the Council's accreditation activities also include advanced education programs for special areas of dental practice, dental internship and residency programs, and education programs for dental hygienists, dental assistants and dental laboratory technicians. In conjunction with its accreditation program, the Council also establishes standards for the approval of certifying programs for dental specialists, assistants and laboratory technicians.

RESEARCH—EXTENSION OF KNOWLEDGE

Dental research is underway in many locations throughout the country with varying levels of interest and sources of financial support. Currently, dental research is active (1) at dental schools and other health oriented settings with institutional support supplemented by extramural funds from the National Institute for Dental Research, (2) within the intramural program at the National Institute for Dental Research in Bethesda, Maryland, (3) at the ADA Research Division at National Institute for Dental Research, (4) at the Division of Dental Health, United States Public Health Service, (5) at the ADA Research Division at the National Bureau of Standards and (6) at the ADA Research Institute located in the Association's Headquarters Building.

National Institute for Dental Research: The NIDR Caries Task Force represents a concerted total team effort by federal and university scientists to eliminate this universal and most prevalent disease affecting mankind. For fiscal year 1970, \$4,712,000 will support the intramural research program at NIDR. The Association maintains a research staff at NIDR engaged in collaborative studies concerning normal and abnormal prenatal oral-facial development.

The Division of Dental Health: The current total Division-budget is approximately \$11,000,000. This amount is divided equally for support of intra- and extra-mural programs.

One aspect of the total program concerns the development of new procedures in research and education methodology. The use of self-teaching devices, teaching cubicles and computer technology is being evaluated. Other facets of the study pertain to the development of improved methods of continuing education for the practicing dentist. Another area of the total program that is of vital interest concerns research studies in the "expanding functions of the dental auxiliary," that Dr. Brown has already mentioned.

The National Bureau of Standards: The research staff of the American Dental Association at the National Bureau of Standards conducts studies concerning the development of composite resins for adhesive restorative materials; clinical evaluation of dentures, amalgam and silicate restorations; production of new alloys for partial denture construction and basic investigations concerning calcium phosphate apatite, fluorides and structures of crystalline compounds.

ADA Research Institute: At the present time, there are four major areas of research at the ADA Research Institute with each area administered by a division head: Biochemistry, Biophysics,

Immunology and Clinical Studies. The four divisions are interdisciplinary in that they provide support for one another in areas which overlap and in those areas where mutual objectives are similar and assistance is required.

Interinstitutional activities, which began only a year ago, have been increasing and not only involve additional institutions but include new areas of endeavor. These institutions include Zoller Memorial Dental Clinic, the Material Institute at Northwestern University in Evanston, the University of Illinois Dental School and Loyola Dental School.

LICENSURE—PROTECTION OF THE PUBLIC AND PROFESSIONAL CONTROL

Licensure is an integral part of the definition of a profession. State licensure of dentists began in this country 101 years ago. Each dental practice act, from the first in Kentucky in 1868 to the last in Idaho in 1899, had as its fundamental purpose the protection of the health, welfare and safety of the people.

Licensure requirements of the individual states vary somewhat, but all have three features in common—graduation from an accredited school, satisfactory performance on a written examination and satisfactory performance on a clinical or demonstration-type examination.

In an effort to produce an outstanding written examination and to standardize the examination so as to more nearly conform to current dental school teaching the National Board of Dental Examiners was created as a standing committee of the American Dental Association in 1928. Initially, only 11 states used the results of the National Board examination. Now, all but three of the 53 licensing jurisdictions use the National Board services for the written examination portion of their requirements for granting a license in dentistry and in dental hygiene.

Of the dentists in practice today, over 43,000 have their National Board Certificates. The dental hygiene National Board examinations are much newer—they were first given in 1962—but, there have already been over 15,000 hygienists examined, over 14,000 certified.

In the change from local construction of examinations to professionally prepared examinations, quality was increased. This was accomplished without diluting the authority or responsibility of state boards to protect the people in their states. State board members have been able to function even better in their role of regulating dental practice for the purpose of ensuring safe, effective dental care for people.

With the almost complete acceptance of the National Boards, discussions within the profession in recent years have explored the need for some mechanism to permit the freer flow of dentists within the United States. The Nixon administration in July of this year announced the establishment of a Task Force to deal with the crisis in the Nation's Health Care System. One of the charges to the Task Force is to review state requirements for licensing and certification which stand in the way of the proper use of scarce manpower. This is the first time the federal government had indicated an interest in problems related to the licensure of health professionals.

It is possible that the Task Force may recommend federal licensure which if adopted would destroy the time-honored system of state licensure. The dental profession has the most restrictive regulations concerning the movement of practitioners between states of all the major health professions. Perhaps more serious attempts should be made to provide our own solution to this problem.

At present three approaches are being taken in various areas. Each undoubtedly has merit. Each may be a part of the final solution.

- 1. Regional (or simultaneous) clinical examinations
- 2. Merit (or exemption) clinical examinations
- 3. Endorsement of another state clinical examination

The concept of a regional clinical examination—one clinical examination, results of which are acceptable to and recognized by each participating state in the region—is operating in the northeast and to a lesser degree in the midwest. It is under serious study in the south and in the west.

Similarly, merit or exemption provisions, exempting a certain portion of a graduating class, are in effect in Missouri, Michigan, Pennsylvania and Virginia. What about endorsement? It is conceivable that a state board might endorse the credentials of an individual and grant him a license without further examination. Illinois, Massachusetts and Rhode Island are doing this now.

THE SPECIALTIES—FOCUS AND REFINEMENT OF SERVICE

The qualification for ethical announcement of limited practice has been established by the Association's House of Delegates and is set forth in Section 18 of the *Principles of Ethics:* "Only a dentist who limits his practice exclusively to one of the special areas approved by the American Dental Association for limited practice may include a statement of his limitation in announcements, cards, letterheads and directory listings (consistent with the custom of dentists of the community), provided at the time of the announcement, he has met the existing educational requirements and standards set by the American Dental Association for membership wishing to announce limitation of practice, or possesses a state license permitting announcement in an area approved by the American Dental Association."

The educational requirements specify completion of a two year course in the special area in an educational institution or hospital which has been approved by the Association's Council on Dental Education.

Once a special area of dental practice has been approved by the House of Delegates a national certifying board is approved which is given authority to certify diplomates in the limited area. However, diplomate status is not required for ethical announcement of a limited practice.

The following 12 states require a specialty license for announcement of limited practice: Alaska, Arkansas, Illinois, Kansas, Kentucky, Michigan, Missouri, Nevada, Oklahoma, South Carolina, Tennessee and West Virginia.

There are eight nationally recognized dental specialties and 430 accredited advanced education programs leading to one of these specialties. Following is a breakdown of advanced specialty programs as well as the number of specialists in each limited area, the number of diplomates as of January 1, 1969 and the founding date of the national certifying boards.

Specialty	Founding Date	Number of Specialists	Number of Diplomates	Advanced Specialty Programs
Dental Public Health	1950	98	82	19
Endodontics	1964	439	302	34
Oral Pathology	1948	89	80	21
Oral Surgery		2,262	964	162
Orthodontics		4,128	737	42
Pedodontics	1942	1,106	154	44
Periodontics	1940	929	325	49
Prosthodontics	1946	654	354	59
Total		9,705	2,998	430

COMPONENT GROUPS—EXTENSION OF ADMINISTRATION AND LEADERSHIP

In his statement on the Relation of ADA to State Dental Organizations,² presented to the July, 1969 Joint Session of the Board of Trustees of the American Dental Association and the Officials of the Canadian Dental Association, Dr. Harold Hillenbrand competently outlines the role and interrelations between the three levels of organized dentistry. It is a short quotation. I think it puts forth an idea that is needed at this time. Dr. Hillenbrand writes as follows:

"There is a confirmed and obvious world-wide trend toward the establishment of a strong national dental organization as a matter of first importance to the profession in its service of the public. The problem of determining the relations of the national organization to its local counterparts still exists but as a diminished problem as experience, confidence and maturity increase. In the United States, the problem of reconciling national and local roles might have appeared to be insoluble but today the American Dental Association is an effective federation of 55 state and federal constituencies and unquestionably has the agreed authority to represent, and speak for, the dental profession on a national basis.

"It is a conjecture but it is likely that the success of the reconciliation of national and local interests arises out of the fact that the 55 constituencies have a strong voice in the determination of policies which govern the national organization. The House of Delegates, which is the supreme legislative body of the Association, is composed of 417 delegates representing, on a proportionate voting basis, all of the 55 constituencies. If a majority of the constituencies do not like the thrust or direction of a national program, appropriate changes can be made by the House of Delegates. This parliamentary arrangement has undoubtedly bred the confidence which permits national and local organizations of the dental profession to work together effectively with unity of policy and program in representing the total profession to the nation."

And then Dr. Hillenbrand concludes with the final paragraphs.

"This effective relation exists almost entirely on the basis of mutual confidence and mutual objectives. There are no readily available sanctions to compel performance of the constituent societies. It is true that the House of Delegates has the power 'to grant, amend, suspend or revoke charters of constituent societies' but the sanction of suspension or revocation of charter has never been used. The House of Delegates may also apply the lesser sanction of withdrawing voting rights from a constituent society for violation of the Constitution and Bylaws of the American Dental Association. This sanction has never been applied."

This is then a first attempt at stage four.

"It is interesting to note that the *Bylaws* of the American Dental Association do not attempt to describe the role of the constituent societies in relation to the national organization. The *Bylaws* merely indicate that a constituent society 'shall have the power to elect its active and life members as active members' of the ADA; 'shall have the power to organize its members into component societies'; 'shall have the power to provide for its financial support and establish bylaws, rules and regulations to govern its membership provided such bylaws, rules and regulations do not conflict with or limit' the *Bylaws* of the ADA; 'shall have the power to discipline any of its members'; 'shall be its duty to collect membership dues,' for the ADA.⁴

There are several areas of concern which the ADA, constituent and component societies will share of necessity: legislation, insurance, dental health education, dental prepayment, accreditation of educational institutions and hospitals, continuing education, recognition of specialists and special areas of practice, Relief Fund, dental auxiliaries, public information, licensure, dental laboratory relations, journalism and judicial procedures.

As a general statement it could be said that the ADA and the constituent societies exist and function for the purpose of representing the profession at the national and state levels respectively. Those who serve at these two levels have the additional responsibility of developing policy and guidelines which will assist in coordinating and implementing programs at the local or component society level. If programs fail in their implementation at the local level then the true impact and benefit of the original purpose will be negated.

The American Dental Association is fortunate to have excellent volunteers who serve as delegates, Council members, trustees and officers. In addition, a staff of 331 employees support the Association's program at the Headquarters Building, the Washington,

D.C. office, the National Bureau of Standards and the National Institute of Dental Research. For the most part, constituent societies have established central offices staffed with full or part time employees. Full time employment of administrative personnel insures a continuity of program which is essential inasmuch as elected officers and Boards rotate annually.

Only the larger and more adequately financed component societies are able to employ staff to assist in the planning and implementation of programs. It seems to me that here is a glaring weakness in our organizational system. At the very point where programs should be established for maximum effectiveness—at the component level—the entire thrust of the profession at the national and state level is threatened because of the lack of adequate local staff. I don't believe dentists taking time from their practices generally can be expected to administer programs on a continuing basis and expect them to succeed. Concern for this void in our organizational structure should be sufficient to encourage component societies to provide adequate financial support for employment of administrative personnel.

Finally, the structure of dentistry can be further strengthened by recognizing that "in unity there is strength." It will take the combined efforts of educators, editors, researchers, representatives of licensing agencies, and specialty groups to reach our goals in this era of health evolution. Surely, if we all go our separate ways the effectiveness of the profession will be weakened. But, if we recognize the American Dental Association and its component organizations as the rallying point and combine our ideas, strength and determination then our chances of hurdling the obstacles ahead will be increased.

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The Administration of Dental Care Organizations*

GEORGE BUGBEET

THE health field is under insistent demand from the public to improve the organization of health services. Questions are being raised under the present organization as to whether the quality of care is as good as it should be, whether services are available to all segments of the population including the poor, and whether a delivery system dominated by solo private practice contains costs or encourages inflation. These questions are particularly pertinent in the face of efforts to improve the availability of services through government subsidy.

The public is moving to exercise greater control in the distribution of admittedly limited health resources. The Dean of the Dartmouth Medical School has succinctly stated the situation:

"Those of us in the health professions, whether practitioner, academic, or administrator, are rapidly becoming focal points in the socio-political arena since we all are participants in an intricate interlocking system that is fully as vital to the Nation as national defense."

Dentistry has been in the forefront in studying these sociopolitical issues. It has exercised considerable wisdom in balancing public and self-interest. The National Survey² demonstrated dentistry's desire to involve others in charting its future. You, better than I, can judge the effect of the recommendations of that Commission. As a member, it would be my impression that some credit can be claimed for expediting trends which have improved the quality and quantity of dental care.

Certainly a major recommendation relates to the need for more efficiently organizing dental manpower to serve the public. It suggests that dentists limit activities to those areas in which their

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special skills are required, leaving to others who are less highly educated tasks for which they are qualified. Today we are discussing how this larger organization will develop, how dentistry will manage it, and whether it is to the advantage of the public and the profession.

Most dentists are in solo practice in an organization with a single auxiliary worker. The dentist entrepreneur manages this organization. He must devote considerable time to developing his practice, attracting the type of patients he hopes for, deciding his public services participation, the hours he will work, the location of his practice, and a myriad of other details which in total shape the success of his enterprise. Through such planning he sets the goals which control his organization.

Planning—an important management function—is a prerequisite for success. Equally important and perhaps more time consuming are other functions such as acquisition of equipment and supplies, rental of space, employment and supervision of personnel, financial accounting, determining the distribution of work and maintaining morale within the organization to permit the delivery of high quality care and to attract and hold patients.

In addition to planning and organizing work, there is the need for evalulating and controlling results. The typical solo practitioner not only has the problem of supervising an assistant but of controlling all aspects of his practice and of maintaining his capabilities. This requires introspection. For example, he can only be successful in maintaining continuing contact with new scientific knowledge if he evaluates his needs and arranges time for learning.

The dentist in solo practice, then, manages his own operations. Planning, organizing and controlling quality are time consuming but of obvious importance. In a larger organization much might be assigned to a manager or administrator with training for this complex assignment.

The universities of this country have developed graduate education to prepare managers for business, government, and hospitals and medical care. The University of Chicago's Graduate Program in Hospital Administration is the oldest such venture in the health field. A review of its curriculum demonstrates the sort of knowledge needed for the administration of scarce resources to

accomplish the purpose of an organization efficiently.³ The success of graduates and the growth of enrollment in university programs, country and world wide, supports the judgment that administrators can be educated to facilitate the health care of patients by professionals in large organizations.

The delegation of management responsibilities in an organization of professionals is not a suggestion limited to the health field. Chief Justice Warren Burger of the Supreme Court, addressing the American Bar Association in Dallas in August, had a similar idea. He urged that the nation's courts begin at once to develop a corps of trained administrators "so that judges can get on with what they are presumed to be qualified to do—namely, dispose of cases."⁴

A primary question before dentistry is the degree to which dental organizations should and must grow and expand with dentists in group practice with a greater ratio of auxiliary workers. My assignment includes examination of the possibility that increased efficiency and economy might result if among the auxiliary workers were a manager to relieve the dentist. Incidentally, management responsibilities present in any organization proliferate in number and complexity as organizations grow in size.

You can judge the degree to which dentistry in the future will be practiced in larger organizations. The literature available and the judgments expressed by some dentists point toward this trend. Indeed, there already is some statistical evidence of larger organizations emerging, though there has been no landslide. Some brief evaluation of the forces leading to growth in size seems warranted.

The recommendation of the Survey of Dentistry suggesting increased ratios of auxiliary workers has already been cited. Certainly, if the public demand were at a level to cope with current dental disease, there would be a major shortage of dentists which would force growth in size of organizations for more efficient use of resources.

Some measure of unmet need comes by projecting information from a recent family interview sample of the nation's population. About 40 million Americans had a toothache in the survey year but only three-quarters of these saw a dentist while one-quarter used a home remedy or did nothing. More disturbing statistics show that 12.5 per cent of the population have never seen a den-

tist and another 42.5 per cent go to the dentist only as needed but not on any regular basis.⁵

The demand for health services in this country up to this time has been largely a matter of each person asking for care as he is able and interested in buying service. His decision to see a physician or dentist is often deferred when it is not an emergency by his decision to spend his money for more pressing needs or more desirable goods or services. This competition with other necessities is particularly intense for low income families, who, as a result, get little dental care.

Then too, public funds to provide health services for the poor have been limited to covering little more than emergency care. Now we see interest in better care, an interest given urgency by racial unrest. There is a movement toward greater assumption of responsibility by government to insure that health services are available to the underprivileged. This is particularly true for children, as is familiar to you. But to this time public funds have had limited impact on dentistry.

Nevertheless, government health officials are presently searching for methods which would permit a broader distribution of health services. Movement to national financing on a broader base is uncertain, since additional funds, if injected in large amounts in a solo practice health care system, might inflate costs rather than redistribute services. On the other hand, to force the professions into organizational settings seems unlikely if the only purpose is to control fees and use of services. Congress presently shows no willingness to impose the controls which would require major change in the practice of dentistry and medicine.

However, because of escalating costs for health care, it would be unwise to think that a movement toward greater organization of professional services will not develop. Medicare and Medicaid are illustrative of action taken by the previous administration. With the change in administration, the action to be taken by government is less clear, but the problems are judged equally pressing. On July 10 of this year President Nixon stated:

"We face a massive crisis in this area and, unless action is taken both administratively and legislatively to meet that crisis within the next two or three years, we will have a breakdown in our medical care system which could have consequences affecting millions of people throughout the country."

The same day a Report on the Health of the Nation's Health Care System, from Secretary Robert Finch and Dr. Roger O. Egeberg, opened with the following paragraph:

"This nation is faced with a breakdown in the delivery of health care unless immediate concerted action is taken by government and the private sector. Expansion of private and public financing for health services has created a demand for services far in excess of the capacity of our health system to respond. The result is a crippling inflation in medical costs causing vast increases in government health expenditures for little return, raising private health insurance premiums and reducing the purchasing power of the health dollar of our citizens."

Mr. Walter Reuther and his Committee of One Hundred is presently committed to a drive for government-financed health insurance. Mr. Reuther recently has predicted that this proposal will become law sooner than most people expect. Incidentally, in the same statement he mentioned that his recommendations for national health insurance would favor the delivery of care through group practice, which he believes will help control quality and costs. Early last month, the state governors in assembly voted in favor of universal health insurance. The health field should not view the urgency of public interest in a more equitable distribution of services complacently.

Universal health insurance through a federal enactment then continues to arouse interest in spite of the fact that it would lead to an immediate increase in the demand for health services. With present dental personnel or even with an optimistic estimate of possible increases, it would appear that such a demand could be met only by a better organization of dental resources. This would mean more delegation of duties to auxiliary personnel. Further, it raises the question of whether a greater quantity of quality dental service might best be rendered under group practice.

Dentistry is wisely studying the implications of groups as an alternative to solo practice. Would such organization permit more efficient delivery of care as well as improve the productivity of dentists? Representatives of group practice dentists are enthusiastic in their endorsement of this form of practice. A speaker at the First Conference on the Group Practice of Dentistry stated:

"From a very broad point of view, the great advantage of group practice is that it will allow a larger patient-dentist ratio." 10

Dr. William E. Marshall's paper is a thoughtful summary of the pros and cons of group practice dentistry. Perhaps the group practice he discusses is an ideal example with, among other assets, excellent management. Whether the ideal model overstates its value and whether group practice is the view of the future for dentistry I leave to you. There is certainly inherent in this kind of organization some loss of freedom for the individual dentist. On the other hand, there can be advantages for both the dentist and the patient.

Speakers at the Conference on Group Practice of Dentistry felt that, by an large, the income of the individual dentist would be increased in group practice. He can have greater freedom to be away from practice. He can arrange better for retirement benefits and security for his family. Economically, then, group practice seems to have advantages for the dentist.

Then, too, studies by Maurizi of the income of dentists having different numbers of auxiliary workers indicate that, on average, dentists' income increases as more auxiliary workers are employed. All of this points to some self-interest for you in the growth of larger dental care organizations. However, I believe public policy decisions which affect the financing and thus the demand for all kinds of dental and medical care will be overriding in stimulating growth of larger organizations. Even now, if further nationalization of health services incorporating current theories of how to encourage more efficient distribution of health services were to come about, group practice in larger organizations, both medical and dental, would be likely.

The public policy debate, then, on how much there is need to change the traditional fee-for-service practice of dentistry and medicine continues to improve productivity and provide a setting for control. As is often true in such debates, emotions are aroused and fears generated. We find the exponents of group practice for physicians claiming great value. If the values stated were all uniformly present, it would lead one to judge that most doctors were dolts in view of slow growth of this type of organization. While values have been proven in a small way, there is no positive, and certainly no proven, assurance this would be true on a much broader base.

The words "cottage industry" are used to describe solo fee-for-

service practice as if health care were being delivered in an obsolete fashion. As a practical matter, this form of practice very definitely is a reflection of our free enterprise system which up to this time has been the dominant force in shaping American life. Fee-for-service practice has faults but many strengths. Indeed, the quandary for the policy maker is how to retain the advantages while coping with inherent problems.

There is no present consensus for action by government. The steady rise in the use of health services and their price per unit continues. It is this uninterrupted trend which builds pressure. Pressure increases when, in the face of surging expenditures, health services are far from uniformly available to the population. Government health insurance is an attractive untested alternative. The distress expressed by officials of the present administration in Washington is indicative, but the action government should take is less clear.

Dental care organizations under any circumstances are likely to grow as a supplement to solo fee-for-service practice. Government action through programs less extensive than universal health insurance to care for the less privileged segments of society would hasten growth. Dentistry might stand ready to give leadership in making available neighborhood health centers providing group practice dentistry. Indeed, it may be that, as with the voluntary hospital, such centers could provide both group practice prepaid dental coverage for those with low incomes and fee-for-service or prepaid group practice for others in the population. The payment for those with low income would be made by government of necessity. Dentistry itself can better judge the degree to which such organization is necessary and inevitable and, all things considered, will serve the public most effectively.

As one who has spent his life in administrative assignments in the health field, I have no conviction that institutionalized health services delivered in large organizations will be as personal and acceptable to the individual as is possible in the best of private practice on a fee-for-service basis. But new forms of organizations have affected the distribution of most goods and services. It is not only such a change as from corner grocery to supermarket but change in method of payment for most purchases, whether automobiles or vacations, through time payments on a postpayment

basis. Prepayment or insurance, either on a voluntary or governmental basis, is the analogy in the health field but with a difference. Both postpayment and prepayment increase the public's ability to buy and therefore the demand for services. The difference is that the purchase of health services by government or voluntary health insurance agency makes that agency the proxy purchaser and permits imposition of conditions for delivery of care on health professionals and hospitals. The current discussions in Washington on amounts to be paid hospitals and physicians under Medicare and Medicaid are illustrative. Indeed, such conditions of control seem to be necessary and inevitable.

Both efficiency of delivery and assurance of quality and control of prices or fees for the mass purchase of health care point toward larger organizations. It seems likely that the public will choose these, whether or not it misses some of the benefits of personal dentistry and medicine. The fact that dentistry is studying new organizational forms which may lead to larger practice settings is commendable. As organizations grow in size, the responsibilities of dentists for delegating to well-trained health administrators and other auxiliary personnel will require new ways of thinking and acting in the delivery of dental care. Certainly dentistry must lead the way as change takes place if this change is to be acceptable to dentists and at the same time recognizes public demand for more care.

There are indications that dentists are more productive in larger organizations, due in part to delegation of duties to others. There is need for increased productivity to meet the dental needs of the public. Demand is increasing and will escalate sharply as government programs increase. Universal health insurance would most increase demand and would encourage group practice. The inexorable movement of events points toward larger organizations for more efficient delivery of care. This will impose some limitations on individual freedom for dentist. In return, though, dentists are likely to enjoy better income through increased ability to provide dental care.

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Old Mountain Climbers

STANLEY A. LOVESTEDT, D.D.S.*

"Bring me men to match my mountains, Bring me men to match my plains, Men with empires in their purpose and new eras in their brains."

—Sam Foss

USING these words as a motif Irving Stone, in his book, Men to Match My Mountains: The Opening of the Far West, 1840-1900, develops the story of men who, over a century ago, opened up the western part of our nation. They were men greater than life size, who matched the mountains, thereby shaping American history.

There remain mountains to be conquered—not physical but every bit as formidable as the great Rockies and the Sierra Nevadas. Some of these are: obstacles to health care for our citizens, both young and old; methods of providing health services; a health service record for each person; in health problems, an obligation on the part of the recipients of care as great as that on the part of the providers of health care; a method in which incentive can complement initiative with reward for extra hours rather than the penalty of taxation for extra effort and output; the emphasis that is placed on basic science education for a subjective private dental practice that is chiefly technical and usually limited to the three dental R's—restoration, removing, and replacing; and the emphasis on "four handed" or "six handed" dentistry without reference to other "anatomical parts," such as the "heart" and the "head."

More of our mountains: In the consideration of a dental education, does a prospective student have a choice of where he may attend? Does one dare aspire to attend the country's outstanding dental educational institution? Where is it? How does it differ from the other 49? Are there really objective differences in dental

^{*} Presidential Address at the meeting of the American College of Dentists, New York City, October 12, 1969.

educational methods or results? Has one segment or spot of our nation been made relatively free of dental problems and needs because of superior effort or because of graduates from a given school? Do we approach the problems of dental education and the provision (not offering) of dental care too much like dentists? Is continuing education going to prove a difficult obstacle? Are not these real mountains?

There are other mountains which ring us in, and, as in any analogy, the examples are highly subjective, so some of our mountains may be shrouded in the fogs and mists of short-sightedness or lack of perspective, appreciation, or understanding.

Additional mountains are: dentistry's support of is own educational efforts in the university forum, planning for postdoctoral continuing education, and the applied research area, which is hardly touched. The development of group practices has lagged. The dentist as a member of the health team too often represents lip service to an idea. His inability to communicate in the academic or medical world limits the dentist to a peripheral role, because of his passive approach. Much can be gained by meriting participation, little by demanding it.

Members of the American College of Dentists have had the opportunity to be giants and to leave their mark. After 49 years we must have a great deal to refer to—or do we? Maybe the question of more importance is, what are we going to do in the next half-century?

One of our concerns for the future should be the College.

In this report to the membership it is a privilege to pay tribute to the College on completion of its first half-century and also to point to the relationship between this year's theme, "Dentistry Today—a Profession in Transition," with that planned for next year, "The Future of Dentistry." The existing membership is responsible for "Dentistry Today," and in this New York program the format of contemporary dentistry is on display for our F.D.I. visitors from abroad and for our own members and colleagues. Whatever our assessment of the present, there is one fearful realization: In the 49 years of the College the age distribution of its membership has become tragically unbalanced. Secretary Nelsen has made available some figures, which he surely will bring to your attention again and again, and has given us permission to in-

form ourselves that we are a bunch of old men—99 per cent of the College membership is over age 40, 78 per cent over age 50, and 21 per cent over age 70. When one views this picture he may be either complacent or concerned. It may also remind one of the popular, not-so-funny comment on the average age of World War II military leaders (69 years) as compared with the average of those who ended the war, the developers of the H-bomb (29 years).

Another way to view the problem is to ask ourselves how we see the situation for the next half-century. Would we buy stock in a "growth"-oriented company with three fourths of its assets over half a century old? Probably—in an antique business. A not-too-bright picture for those who hold that the membership of the College is made up of the leaders (past tense?) of dentistry: 78 per cent of the members over age 50, 50 per cent over age 60, and 35 per cent over age 65. These figures give an immediate answer to those who ask for life membership to become effective at age 65. Those of us who brought about a change in life membership from age 75 to 70 had our problems.

It should be apparent that College recognition of younger men will help these younger members in turn to recognize younger men. There is not a lot of professional intercourse between men in the 30 to 40 age group and men over 70. Hours, interests, attitudes, abilities, philosophies—almost any area considered emphasizes variations. Our own generation gap!

One other long-standing problem that emphasizes the age distribution of the College membership is that of section activities and responsibilities. After observing and working on this problem for several years I pose the possibility of programming a deemphasis of sections and developing a stronger central organization. This would obviate the problem of representation for those who belong to no section or the problem of those sections that do nothing. Are there any giants for these mountains?

John Gardner² has considered the problems of aging of individuals and societies in his book *Self-Renewal: The Individual and the Innovative Society*. He states in his introduction that men and women need not fall into a stupor of mind and spirit by the time they are middle-aged. He points out that renewal depends in

some measure on motivation, commitment, conviction, the values men live by, and the things that give meaning to their lives.

Applying Gardner's pattern, then, brings out the fact that societies and organizations can go forward only if someone cares. One of our College needs is to recognize that we do not enjoy eternal youth. We have our dead wood—do we have our seed beds? Another factor we need to guard against is the tendency of organizations to rigidify and decay. To help overcome this we should consider our own programs of innovation. This would help overcome the tendency toward elaborateness, rigidity, and massiveness and away from flexibility and simplicity.

Self-renewing organizations and the self-renewing man never reach the point of feeling they have "arrived." This could occur only in the absence of goals, or in having lost sight of them. At the midpoint of our first century I can think of no better guide or manual for the present and future members of the American College of Dentists than Gardner's book on self-renewal.

In closing, may I congratulate the nominators of those to be inducted into the College this afternoon and especially the nominees, whose merit has been recognized by their colleagues. You, the new men, have no conformism to limit you in accomplishments, to threaten your individuality. Your minds are free to envision all kinds of possibilities. This is no license to be antagonistic or hostile to the College organization or the profession, but it is to declare for you a freedom in creative activity, speculation, and inquiry, and to imagine the widest range of possible solutions to the present and future problems of the American College of Dentists and dentistry.

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GEORGE BUGBEE GIVEN HONORARY FELLOWSHIP

At the New York Convocation, Mr. George Bugbee received an honorary Fellowship in the College. Regent William E. Brown presented the following citation:

"Mr. George Bugbee, Director of the Center for Health Administration Studies of the University of Chicago, and Professor of Hospital Administration in the Graduate School of Business, was Executive Director of the American Hospital Association from 1953 to 1954. He is a graduate of the University of Michigan in 1926.

He served for 17 years at the University Hospital in Ann Arbor and at City Hospital in Cleveland, Ohio.

He has just completed eight years as a member of the Federal Hospital Council. He is a Past-President of the National Health Council, a Governor of the American College of Hospital Administrators, and has served on many national commissions and committees in the health field which includes a considerable and significant service to dentistry as a member of the Commission on the Survey of Dentistry.

His talents and industry have been much in evidence. He has been recognized in his own field having been elected to Fellowship in the American College of Hospital Administrators and receiving the Award of Merit from the American Hospital Association.

It is my privilege to present Mr. George Bugbee, who has been elected to honorary Fellowship in the American College of Dentists."

GIES AWARD PRESENTED TO LEUMAN M. WAUGH

The William John Gies Award for outstanding contributions to the advancement of the dental profession and its public appreciation was presented to Dr. Leuman M. Waugh. Regent Louis Terkla read the following citation:

"Dr. Leuman Maurice Waugh has had a most distinguished career in dentistry. A Summa Cum Laude graduate of 1900 from the University of Buffalo, he remained there as a Professor of Histology and Pathology for 14 years.

Dr. Waugh is one of the five founders of the Columbia Univer-

sity Dental School and was a founder of its Graduate Department of Orthodontics. He was Director of Orthodontics for 29 years and Dean of the Dental School for six years.

Dr. Waugh has not confined his interests to the university for he reorganized the Orthodontic Care Department of both the City of New York and the State.

He has served as consultant to the Indian Service of the Department of the Interior as Dental Director of the United States Public Health Service.

He is a charter member of the International Association for Dental Research. He has held many offices in organized dentistry; among them the presidency of the Dental Society of the State of New York.

He has been a worthy Jarvie Medal winner and is the recipient of an honorary degree from the University of Montreal.

His home is now at Gratitude in Kent County, Maryland. At 92 years young, he recalls well his association with Dr. Gies which began in 1908."

Dr. Robert Montgomery, President of the Dental Society of the State of New York, accepted the award for Dr. Waugh, who was unable to attend the convocation.

PETER C. GOULDING RECEIVES AWARD OF MERIT

Mr. Peter C. Goulding was the 1969 recipient of the American College of Dentists Award of Merit for outstanding services to the dental profession. Vice President Lon Morrey read the following citation:

"Peter C. Goulding is an Assistant Secretary of the American Dental Association and Director of the Bureau of Public Information. He has been with the American Dental Association since 1950.

Mr. Goulding is responsible for public relations and dissemination of information for the 111,000 members of the American Dental Association.

He is a native Chicagoan. After service in the Naval Air Corps in World War II he attended DePaul University, graduating in 1950. Following a period of newspaper work he joined the American Dental Association's public relations staff. In 1956 he was made secretary of the Association's Council on Scientific Session.

In 1958 he assumed the duties of secretary of the Centennial Staff Committee, 1959 marking the Association's 100th anniversary.

Mr. Goulding is a member of the Public Relations Society of America and is active on several of its committees. He is also a member of the National Association of Science Writers, the Publicity Club of Chicago and the American Association for Advancement of Science.

Mr. Goulding is the author of a number of articles on dental health which have appeared in popular magazines. He has also written numerous articles on public relation practices which have appeared in dental and medical periodicals, and is the author of the public relations manual for many dental societies.

In addition, Mr. Goulding has been very active in the Christian Family Movement, its national committee, and is a consultant to the American College of Dentists, their Committee on Professional Relations, the American National Council for Health Education of the Public, lastly, the Committee on Fluoridation with the Public Health Service, and last, the Committee of the American Dental Association and the American Pharmaceutical Association.

It gives me a great deal of pleasure to present Mr. Goulding for the Award of Merit."



The Objectives of the American College of Dentists

The American College of Dentists, in order to promote the highest ideals in dental 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 development and use of measures for the control and prevention of oral disorders:

(b) To urge broad preparation for such a career at all educational levels:

(c) To encourage graduate studies and continuing educational efforts by dentists;

(d) To encourage, stimulate, and promote research:

(e) To encourage qualified persons to consider a career in dentistry so that the public may be assured of the availability of dental health services now and in the future;

(f) To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient through sound public dental health education;

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

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

(i) To urge upon the professional man the recognition of his responsibilities in the community as a citizen as well as a contributor in the field of health service;

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

This is from the Preamble to the Constitution and Bylaws of the American College of Dentists.

