# the Journal of the Generican College of Dentists

Las Vegas-1965

Optimal Health in the Social Order Saturday, November 6, 2:00 P.M.

Health Care for the American People Sunday, November 7, 9:00 A.M.

# the Journal of the American College of Dentists

#### A QUARTERLY PRESENTING IDEAS IN DENTISTRY

T. F. McBride, Editor College of Dentistry Ohio State University 305 W. 12th Ave. Columbus, Ohio 43210

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# Editorials

# The Negro Dentist and ADA Membership

In most instances a dentist must be a member of a component and a constituent dental society before becoming a member of the American Dental Association. If a Negro dentist cannot join these two societies he is denied membership in the American Dental Association. This is happening in some sections of the United States.

This, despite a 1962 resolution of the ADA House of Delegates requesting that local and state societies eliminate such racial discrimination. The resolution actually was "designed to apply sanctions against constituent societies whose bylaws violate those of the American Dental Association" (J.A.D.A., August 1965, p. 384).

Michigan and New York, with the support of Minnesota, have submitted resolutions to the 1965 House of Delegates urging that "resolute action be taken to enforce the actual intent of the 1962 resolution of the House of Delegates to prevent discrimination in membership entrance on the basis of race, creed or color by (1) advising all constituent and component societies that non-conformance with the spirit and the intent as well as the letter of the ADA Bylaws may lead to sanctions, including revocation of charter; (2) encouraging all members of the National Dental Association not at present enrolled in the ADA to submit applications for membership; [and] (3) discouraging any local subterfuge (such as inability to obtain sponsoring signatures) which would allow such discrimination."

The first word in the above quotation (*ADA Newsletter*, Sept. 13, 1965)—resolute—is defined by Webster as, "Having, or characterized by, a decided purpose; determined; resolved; hence, bold; firm; steady."

When the Michigan and New York resolutions (they are identical) come before the House of Delegates during the 106th Annual Session in Las Vegas, the second week in November, they should receive the approval of the House.

Indeed, bold and firm action is now of vital import if organized dentistry—to quote from an editorial in the August 1965 Journal of the American Dental Association—is to remove "... the last vestiges of racial discrimination within the dental community."

T.McB.

## The Mace and Torch

Those who are about to become Fellows of the American College of Dentists, and perhaps some who already hold Fellowship, may wonder about the symbolism of two of the Convocation's ceremonial properties—the torch and mace.

Nearly half a century ago, when the College was founded, dentistry needed a common light to illuminate the prevailing dark areas of undue pretension, empiricism, commercialism, bigotry, selfishness, greed, and ignorance. The torch signifies the role of the College as a source of enlightenment and guidance. The torch is a light of learning that the College keeps burning brightly.

The mace essentially is a club-shaped staff of office, borne before officials or displayed on the table of a responsible body as a symbol of authority. In medieval ages the mace was a weapon of offense and defense. Later it became an ornamental trapping, and a protector of the "king's person." Now it is a symbol of lofty purposes and noble ideals around which all who hold kindred ideals may rally.

In 1939, at Milwaukee, a Ceremonial Committee (Otto W. Brandhorst, Albert L. Midgley, and Clarence W. Koch, chairman) presented this emblem of authority—the mace—to President Arthur H. Merritt.

Dr. Merritt, in accepting the mace, dedicated it "for all time to come, to unselfish and inspirational leadership." He then stated, "May it ever be found in the vanguard of every righteous cause; may it lead us ever onward to more noble objectives, and, should the occasion demand, may it be used like its prototype, as an instrument of destruction against all influences subversive to the forward march of dentistry in all of its activities."

The mace and torch of the American College of Dentists: enlightenment, guidance, leadership, and authority.

T.McB.

Two years ago, April 1963, a Seminar on Departments of Social Dentistry was held at Kellyton, Alabama. This was sponsored by the University of Alabama School of Dentistry and the Manpower and Education Branch, Division of Dental Public Health and Resources, USPHS. In 1960 Dr. Blackerby had posed the question: "Why Not a Department of Social Dentistry?" (J. D. Educ., Sept. 1960). At the Kellyton seminar he continued to promote the need and desirability of such a department in dental schools. He called it aptly "the curricular orphan," and discussed what to name this apparently unwanted waif.

# Social Dentistry: The Curricular Orphan

PHILIP E. BLACKERBY, JR., D.D.S., M.S.P.H.

AMONG my pet aversions, one is to take twice as long as necessary to say what I have to say; another is to say the same thing twice to the same group. On many speaking assignments I have concluded regretfully that, in trying to avoid my aversions by being brief and non-repetitive, I have been remarkably ineffective in my effort to communicate. My first aversion would give me time to "review the proposal that dental schools establish a Department of Social Dentistry." My second aversion told me: this is an old story which everyone has heard before.

Lon Morrey's editorial (1) on the Survey of Dentistry came to mind and I recalled his classic lines which someday may be remembered as the "granddaddies of unwarranted assumptions," to the

Dr. Blackerby is a former Regent and President of the American College of Dentists, and is Director of the Division of Dentistry, W. K. Kellogg Foundation.

effect that ". . . it is presumed that all dentists have read [The Survey Report] or at least have read its summary. If that presumption is correct, it may be presumed that most of the 105,000 dental practitioners in the United States are in accord with the 74 basic recommendations offered by the Survey Commission. . . ."

Then I recalled some of the violent audience reaction to this statement. As one reader put it, in a letter (2) to the editor of the *Journal of the American Dental Association:* "I would venture a presumption that half of the dentists of the nation don't even know what it is. And of those dental practitioners who have read it, most that I know are not in accord with its basic recommendations—not by any stretch of the imagination." The letter-writer's conclusion undoubtedly was as lacking in validity as was the editor's presumption, but it may have been based at least on a more realistic appraisal of dentists' attitudes and reading tendencies.

I decided to allot myself a few more than five minutes, and to risk a few redundancies, on the assumption that a part of this audience has never heard of the proposals to establish "Departments of Social Dentistry"; another part is vaguely familiar with the concept and thinks it advocates socialization of dentistry; and the remainder understand it fully but are gracious enough to tolerate its reiteration.

To start with a simple definition: "Social Dentistry" to me means the social aspects of dentistry as distinguished from the technical aspects. In the dental curriculum it encompasses all the subjects of direct social import, such as public health, ethics, jurisprudence, history, social and economic relations, psychology and human behavior, civil defense, biometrics, and epidemiology. In addition, "Social Dentistry" can be interpreted to include certain phases (i.e., the social aspects) of preventive dentistry, dental economics and practice administration, gerontology, radiological health, hospital relations, chronic disease and rehabilitation, and of health and pre- and postpayment plans. All of these subjects, in varying degrees, have the common denominator of social implication—of significance to society as a whole, rather than to the individual patient alone, as might be said for a strictly technical subject such as endodontics or crown and bridge prosthodontics. In this sense, the dental curriculum may be thought of as comprising two major phases—social dentistry and technical dentistry, with obvious overlapping between the two.

Three basic premises underlie the proposal that dental schools establish departments of social dentistry:

- (1) Dentists should have a greater sense of social responsibility than they have demonstrated up to now;
- (2) There is a serious imbalance, both quantitative and qualitative, between the technical and social phases of the dental curriculum; and
- (3) A department of social dentistry could be an effective device for lessening this imbalance and achieving a greater social consciousness on the part of future dental graduates.

Yardsticks for measuring the social responsibility of dentists have not yet been perfected, so it is difficult to be objective or precise in documenting my first premise. Nevertheless, there are unmistakable signs pointing to the dental profession's relative ineffectiveness as an instrument for social progress. Some of these indicators are:

- (1) The profession's failure to secure wide and rapid public acceptance of fluoridation.
- (2) The reluctance of dental practitioners to lend their active support and promotional efforts to state and local dental public health programs, to governmental and voluntary aid for dental education, and to broader use of dental auxiliaries.
- (3) The slowness which has characterized the development of prepayment and insurance programs to extend dental services to a greater segment of the population.
- (4) The relative paucity of articles and research papers on subjects of social relevance in the dental literature. (The Survey of Dentistry reported (3) that "dental schools are conspicuously inactive in social science and pubic health research.")
- (5) The comparative lack of emphasis on subjects of social import in the curricula of our dental schools. (Again the Survey of Dentistry, in a table summarizing the "Clock Hours Used for Various Subject Areas in the Dental Curricula of 45 Schools in 1958-59," reported (4) a median figure of sixty hours (less than 2 per cent) devoted to "history, ethics, jurisprudence, practice administration and technical composition" and made no reference whatever to public health and other subjects of social import.)

A hard-hitting newspaper editor put it more succinctly (5), during a public relations seminar sponsored by the Michigan State Dental Association. He said, "Deserved or not, dentists have become known as a group who do nothing but practice dentistry. In the public's eye they don't provide community leadership, they don't support community activities, with either time or money. . . . So far as the public is concerned, they all could be members of 'Anonymous Anonymous.' "This seems to suggest that, while minding one's own business is fine up to a point, dentists have shown a strong tendency to overdo it. As the same author observed, we "have in

many instances overlooked or forgotten the extracurricular practice of citizenship."

Galagan, too, pointed out (6) at the 1963 National Dental Health Conference that, "Anyone reviewing the literature on the social responsibilities of the dental profession will find certain adjectives used with alarming frequency to describe dentists: narrow, materialistic, insular, isolated, self-centered. These are not the criticisms of iconoclastic outsiders. Many thoughtful dentists have applied them to their own profession. Obviously these dentists feel that the way in which the profession is measuring up to certain of its responsibilities leaves something to be desired."

To move on to my second premise, perhaps I can offer somewhat more objective evidence to show the imbalance between the subjects of social import and those of a technical nature in our present dental curriculum. I have reviewed the most recently available catalogs of 44 of our 47 dental schools, identifying as best I could those courses which appear to fall into several categories of social relevance: public health, preventive dentistry, psychology, practice management, and as a fifth "catch-all" group, history, ethics, jurisprudence, and any other subject that could possibly be classified as having social, rather than technical, significance.

Before revealing my findings, may I say that when I made a similar search in 1959, I came to the conclusion that 0.5 per cent of the total curricular hours were being devoted by our schools to the teaching of public health, whereas the Curriculum Survey Committee more than 25 years ago had recommended a modest 1.8 per cent for this phase of the course of study in dentistry. And that recommendation was made just prior to the passage, in 1935, of the Social Security Act, which marked the real beginning of dental public health programs in this country.

And now my latest curricular culling has produced the following average numbers of clock hours devoted to the five categories of subjects falling within the scope of social dentistry, as I interpret it:

Thus it can be seen that public health, on the average, is allotted less than one-half of 1 per cent of the total curricular hours, and all of the subjects of social import put together (even including practice management, to give it the benefit of the doubt), rate less than 2 per cent of the total teaching time. In these days of rapid social

,	TOTAL CLOCK I	HOURS .	ALLOC	ATED	TO	SELECTED	COURSES
	II	N FOUR	YEAR	CURR	ICU	LUM*	

Course	Range of Hrs.	No. Zeros	Avg. Hrs.	Per Cent of Total Curricular Hours
Public Health	0-64	7	20.8	0.47
Prev. Dentistry	0-44	32	6.0	0.14
Psychology		36	3.7	0.08
Pract. Management		9	18.7	0.43
Hist., Ethics,				
Jurisp., etc	0-96	5	38.0	0.86
Total			87.2	1.98

<sup>\*</sup> From 1961-1963 catalogs of 44 U. S. dental schools.

change, with social pressures on the dental profession constantly increasing, need I say more about a *quantitative* imbalance?

I will comment but briefly on the *qualitative* defects in our system of teaching the subjects of social relevance. All of us agree, I suspect, that these subjects can be appropriately referred to as "curricular orphans." In most schools they have no departmental home, and they belong to no one in particular among the members of the regular faculty. They are usually assigned to visiting lecturers or other part-time staff, or they may be adopted by full-time teachers whose major interest and responsibility are in one of the technical fields of dentistry. Thus they are seldom coordinated with or integrated into the basic curricular pattern, even to a moderate degree. To illustrate their plight even more graphically, they sometimes have to be taught by the dean!

My third premise is based on nothing more than logical reasoning, plus a little experience as a teacher and a dean. The courses I have been talking about need organization, continuity, and correlation. They need someone to put them together in a cohesive pattern that will bring out their full meaning and significance in the total structure of dentistry. And perhaps most of all, they need to be taught by faculty members who are dedicated to, as well as qualified for, the teaching of subjects of social import. There is no justification for a double standard of instruction in our dental schools—these courses should be made equal in quality and proportionate in dimension to those in the technical areas.

And so it has seemed logical to me that the subjects of social import be reorganized within the administrative framework of a single department. With appropriate full- and part-time staff, such a department could be expected to develop a strong program of teaching and research in this important area, to serve a coordinative function in relation to other departments having a secondary interest in social matters, and to provide leadership for the dental school in carrying out its responsibility for community service. Surely such a departmental structure would have obvious and substantial advantages over the present system (or lack of system) wherein these subjects and these functions are the responsibility of everyone in general, and no-body in particular.

It has been said that such a plan would necessitate a considerable increase in the number of clock hours devoted to the teaching of this phase of the curriculum. Such a possibility cannot be denied, but neither can it be denied that a considerable increase would be fully justified if more effective teaching and a better balanced product were the result. Surely even the most zealous professor of a technical subject would concede that the social phase of dentistry is entitled to a bit more than 2 per cent of the total curriculum time. However, I am convinced that even within the limitations of the present curricular pattern, and without a substantial reallocation of time, a far better teaching job could be done under the departmental plan that has been suggested.

I now refer briefly to the semantic implications of the proposals for a "Department of Social Dentistry." While a name, per se, is of very little importance, I have yet to hear one that fits the concept as well as "social." The only valid objection, it seems, is that the phrase carries with it the undesirable connotation of "socialized dentistry." I recognize, of course, that this may be a real disadvantage in our efforts to advance the cause of better teaching of the subjects of social import. I have racked my brain, as have others across the land, to find an alternative that is reasonably suitable and descriptive. What is needed, as I see it, is a term that projects the "umbrella" image so fundamental to this concept of the social vis-à-vis the technical aspects of dentistry, covering all those areas that pertain to society as a whole rather than to the individual patient, and of all those subjects or parts of subjects that contribute to the professional and social maturity of the student, instead of to his technical skill.

Even if qualified parenthetically, "Social (not socialized) Dentistry" has the insurmountable disadvantage of provoking misinterpretation and hence opposition. "Community Dentistry," a term now rising in popularity, is said (7) by its newest sponsor, the University of Michigan, to involve "the role of the dentist as a professional person in his community." But this term, like "Public Health Dentistry," has an undesirably narrow connotation based upon the traditional interpretation and attitude of the dental profession toward public health and care of indigents. Moreover, some have likened it to "Communal Dentistry," implying a pink tinge.

"Ecological Dentistry," as recently adopted at Harvard (8), has a certain euphonious appeal and appropriateness by literal definition, but it has the great disadvantage of being meaningless to the majority of dentists. "Dental Sociology," "Dental Social Science," "Humanistics," "Socio-Economics," and even "Dental Horizons," as variously proposed by others, appear to have the same drawback of unfamiliarity and vagueness, at least to the uninitiated.

My own choice, after a last, long, wistful look at my seemingly stigmatized "Social Dentistry," seems finally to have narrowed down to two more realistic possibilities: "Preventive Dentistry" and "Environmental Dentistry." The first of these does not differentiate properly the societal and individual components of dentistry, but it has the practical advantage of a well established precedent in the field of preventive medicine, connoting a breadth and scope considerably beyond the literal definition of "prevention." A similar argument can be advanced for the term "Environmental," which probably comes closer to having the broad implication of "Social" or "Ecological," but without the undesirable connotation of the former and the vagueness of the latter.

I like "Social," but I'll settle for either "Preventive" or "Environmental." What'll you have?

References will be found on page 375.

# Prepayment Dental Programs: Threat or Challenge?

ROBERT L. GLASS, D.M.D., Dr.P.H.

Prepayment of dental care is a topical subject today, both in the literature and at dental society meetings. The American Dental Association recently recognized the significance of prepayment through the authorization of a National Association of Dental Service Plans (1). Less than 1 per cent of the United States population is presently included in prepaid dental care plans; it is only logical to question how such a small program has generated so much widespread interest. It has been estimated that one-half of all dental care will be prepaid by 1970 (2), and another source estimated that one-third of the population will be covered without exclusions by 1974 (3). The years and proportions cited may be open to question; the concept is more factual. Prepayment for dental care is here and here to stay.

Recent years have witnessed tremendous advances in health sciences and social awareness, and their interaction has had a profound effect. Perhaps the greatest effects are yet to come. New attitudes have developed toward health, which has come to be defined as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (4). In 1952, the President's Commission on the Health Needs of the Nation stated, "Access to the means for the attainment and preservation of health is a basic human right" (5). Medical care has been defined as "preventive, diagnostic, therapeutic and rehabilitative services, and the auxiliary supplies and services thereto, provided by qualified medical, dental and related personnel . . ." (6).

According to these concepts, the dental profession today is providing a part of the health care to which society is entitled as a right. These concepts have generally developed outside of the dental pro-

Presented at a faculty meeting, Harvard School of Dental Medicine, May 10, 1965. Dr. Glass is Associate Clinical Professor of Ecological Dentistry, Harvard School of Dental Medicine; and Associate Staff Member, Forsyth Dental Center.

fession. They have been focused on dental health by the publication of the Survey of Dentistry (7) and the National Health Survey (8). During the period of the latter survey, it was estimated that about a third of the population visited a dentist within a year and almost a fifth had never seen a dentist. This on the surface appears paradoxical in view of the acknowledged significance of dental care. Furthermore, an ever increasing shortage of dental manpower has been predicted in relation to dental health needs (9). The dental profession today faces the problem of what attitude to take toward the expansion of prepayment programs which will increase the demand for dental care.

The possible effect of prepayment programs on dentistry may be examined within the traditional triad of research, education, and service. In the field of service or private practice, the "third party" influence will be felt, resulting in some loss of freedom as the dentist becomes more involved in the health of society. This loss of freedom may be relative, and in the long run beneficial both to dentistry and society, resulting in more and better dental service. Although dentistry is considered a part of comprehensive health service, some dental treatment is elective or cosmetic in nature. It is questionable whether prepayment plans can support all aspects of dental treatment. A compromise concept of essential or basic dental service may have to be provided under the plans until backlogs of accumulated needs have been met. This curtailment may be considered as loss of freedom, but may prove essential to preserve the financial structure of prepaid programs.

Today those organizations purchasing prepaid health services are intensely interested in the cost and quality of these services. Their attitude is reflected in the idea that to neglect cost and quality control amounts to condoning high cost and poor quality. These ideas are reaching organized dentistry. There are complaints about suggested changes, using such well worn clichés as creeping socialism, third party intervention, and interference with free choice.

Until recently, the private practice of dentistry was one of the last vestiges of private enterprise. Once licensed to practice, a dentist had only to renew his license and exhibit an average amount of skill. He was free to make his own decisions in conjunction with a patient concerning treatment and fee. Times have already started to change. Society has demonstrated interest and concern about certain aspects

of dental practice. In some states, the dentist is subject to periodic inspections of his X-ray equipment, with fines and/or jail the penalty for failure to comply with radiological health regulations.

Prepayment programs are raising the possibility of ceilings on fees, whereas in the past the dentist and his local society were concerned with the opposite—minimum fees. In theory, the quality of dental care was assured by the State Board of Dental Examiners and the dental society. In practice, the State Board principally examined for original licensure and the dental society has been reluctant to evaluate quality. While quality control features have been included in several dental service corporation programs, these must be extended to keep up with the growth of prepayment. This concept is presently unacceptable to many, since it also represents an intrusion into individual privacy. However, in the final analysis, this should help raise the standards of dental practice and, at the same time, the image of the profession.

According to the American Dental Association, there has been an increasing trend since World War II toward partnership practice (10). In spite of the advantages of sharing expenses and increased net income (up to about \$5,000 per year), only 11 per cent of dentists practice in partnership or other expense sharing arrangements (11). These cost sharing arrangements will undoubtedly continue to expand along with prepayment, and ultimately stimulate the development of actual group practice.

Even the field of dental research might be affected by extension of prepayment for dental care. Such large sums of money would be involved that the federal government would step up research and development in disease prevention and more effective treatment methods. Until recently, the development of new drugs and equipment has been largely the responsibility of industry. In the future, this area may find expanded support. Current interest in self-bonding resins may be extended to the development of biological materials to remineralize tooth substance. Dentistry may find a practical use for methods of laboratory interest today, such as lasers and ultrasonics. Epidemiological studies of growth and development may pinpoint the stages for early interception and correction of orthodontic problems.

There is a special point in speculating about the wide range of possibilities. Many more disciplines may be involved, and more oral

health related research may be sponsored at institutions other than dental schools. In order to compete for available funds, dental schools will require staff members well-qualified in their fields and research methodology.

Perhaps the most significant field to be affected is dental education. Prepayment and its ultimate influence on dental education may be analogous to "Sputnik" and the advances it helped stimulate in secondary school science education. Who would have predicted that a rocket could have sufficient thrust to reshape American science education? This Russian achievement demonstrated that existing demands for science education in the United States should not have been the basis for planning. By the same token, existing demand for dental care in the United States should not constitute the sole basis for planning for future dental health services. It is not enough to meet the future with only more dental schools and more dentists. Through carefully evaluated experiments, existing methods of education and delivering dental care must be improved.

However, educational experiments face a number of problems, among them financing and accreditation. Extensive experiments will require federal expenditures even greater than those anticipated in the future. It is unlikely that any major studies can be supported by the dental schools alone. Accreditation involves a process of generally comparing a given education program with a set of standards, which have a limited amount of flexibility having been established on the basis of the status quo. In any experimental program, the status quo represents the point of departure. Experimentation in dental education will be discouraged so long as such experiments risk the loss of accreditation. Thus the status quo is preserved. Some years ago, certain dental schools revised their curricula of the first two years in recognition of the significance of basic sciences. Logical extensions of this program have not come to pass.

Fifteen years ago there was an ill-fated effort at the Forsyth Dental Infirmary for Children to train dental nurses to prepare cavities and place restorations. The uproar from dentists reverberated across the country. Today there are similar programs under way in the United States and England. If these programs prove successful and adaptable to American practice, where will such auxiliaries be trained in large numbers?

Dentistry per se has no institution comparable to the modern hos-

pital for the training of auxiliaries. Will these auxiliaries be trained by the hygiene schools, junior colleges, trade schools, dental schools, or the government? The training institution selected might have a profound effect on dental education and practice. One should not need a reminder today of the difficulties with dental laboratory technicians, who have generally been trained *outside* of the profession and who today are resisting control from *within* the profession. The many medical auxiliaries in modern medicine are generally trained in the hospital environment under the control of the profession at the outset.

Again, the equivalent of the hospital does not exist today solely for dentistry. Perhaps the dental center educational complex (12) could provide the proper environment for the education of the dentist and the training of his future auxiliaries. In addition, such a center could provide opportunities for the dental student to learn to work with auxiliaries. It is doubtful that the conventional dental school clinic may be adapted to the inclusion of many more personnel.

If many of the technical procedures could be assigned to auxiliaries under the dentist's supervision, the dental student of the future would have time for study in depth of subjects now reserved largely for the specialists: oral surgery, orthodontics, and periodontics.

The significance of expanded use of auxiliary personnel was recognized in the report of a Royal Commission on Health Services in Canada, excerpts from which were published in the *Journal of the American Dental Association* (13). Fifty-six recommendations. one-fourth of the total, were specific to dentistry. Among these were:

- 1. A two-year training program for New Zealand type dental nurses:
- 2. Comprehensive dental care for all children under age 18, expectant mothers, and welfare recipients; and
- 3. Rejection of voluntary health insurance.

Such a program and/or greatly expanded prepayment programs might even affect the supply of patients for dental school clinics. A shortage of hospital teaching patients has been cited by medical educators as a result of increased affluence. Will it be necessary as well as desirable to utilize private patients for teaching? Conventional

clinic facilities will not lend themselves to the treatment of private patients.

These questions are simple to raise. Their intelligent answering requires penetrating analysis of many factors, among them the use of auxiliary dental personnel presently non-existent in the United States, the future expansion of dental prepayment, and the associated increase in demand for dental services. The dental profession can still absorb some increase in demand, although a shortage of 16,000 dentists is projected for 1980 (9). However, if demand exceeds the profession's capacity, auxiliaries may appear on the scene outside the control of a profession understaffed due to underestimates of demand.

The time is rapidly approaching when dentistry must:

- 1. End its efforts to preserve the status quo alone;
- 2. Analyze the health needs of the nation in terms of existing manpower and its ability to deliver health services;
- 3. Organize the profession with sufficient auxiliaries under dentists' supervision; and
- 4. Revise the facilities and curricula of dental schools to be in concert with the above.

The extension of prepayment for dental care and its many ramifications may be viewed as a threat, or as a challenge. Prepayment and its associated generation of increased demand for dental care represent a threat to a profession unmindful of the health of society, a threat in the face of inability to meet society's oral health needs. Abdication by the profession of its responsibilities to promote and preserve the oral health of the public may create a vacuum which lay and government groups may fill with personnel, policies, and programs *outside* the control of the dental profession. On the other hand, prepayment may be viewed as a challenge to reorganize the teaching and practice of dentistry so that it may provide ethical and comprehensive oral health services for all of the society of tomorrow.

References will be found on page 375.

In 1963-1964, Jess Hayden was a Fulbright-Hays Visiting Professor at the Royal Dental College, Aarhus, Denmark. The JOURNAL has published his comments on dental education and practice in Denmark (July, 1964) and in Portugal (January, 1965). Now, Finland. And coming up is a concluding paper of remarks about Norway. Dr. Hayden has resumed teaching at Loma Linda University.

### Dental

## Education in Finland

JESS HAYDEN, JR., D.M.D., Ph.D.

THE student who wishes to study dentistry in Finland at the University of Helsinki, or at Turku, must, after passing the "student examination" which terminates the years of training in the gymnasium, hurdle a series of examinations in biology, chemistry, and physics, over a period of two months preceding the fall session of the University. (In addition, the University of Helsinki recently has introduced a dental aptitude test for manual dexterity, which is being carefully observed by the faculty at Turku.)

About 50 per cent of those students who pass the examination are selected for the medical or dental schools, on the basis of their marks on the "student examination" and the aforementioned basic science tests. The admissions committee is comprised of representatives of the medical faculty including usually the Deans of the dental and medical faculty, and the Assistant Dean of the latter. The approximately 20 per cent of those applicants failing the tests in the basic sciences and those otherwise not admitted are given two additional opportunities.

There is an alternative route which may be taken in lieu of the

"entrance test," or after having failed in the test. The student may enroll in the University and study biology, physics, and chemistry with one of the three subjects as a major. At the end of 3-4 years the degree of Cand. Phil. is granted and admission to the 2nd year standing in medicine or dentistry is possible. The Cand. Phil. is considered, for purposes of selection for admission, in the same academic category as the physician who applies for dental training, or the dentist who pursues medicine. The program may be likened to the combined Ph.D.-D.D.S., or Ph.D.-M.D. program in the United States. It is of interest that there are probably six dentists and a similar number of physicians now studying for the combined degree of M.D.-D.D.S. In the past the majority of those graduating from this program have not entered academic life, but usually engaged as dentists in the private practice of oral surgery. At the end of four semesters the dental student faces comprehensive examinations in biology, physics, chemistry, biological chemistry, anatomy, and physiology. The successful student is awarded the degree of Cand. Odont.

In Finland, as in the United States, the dental student after two years of preclinical studies welcomes practical work. To combat the idea that the essence of dentistry is "tooth carving," the faculty at Turku have added to the clinical curriculum a series of seminars at which clinical surveys, written and presented by students, are discussed. The assignments are given in the 8th semester and discussion begins in the 9th and continues through the 10th semester. In addition the relation to clinical practice of biological and histo-chemical phenomena are considered.

Approximately 100 restorations of various types are required. The work is graded at every stage, and competency determines the final requirement. The majority of the laboratory work is done by the Institutes' four technicians or sent to commercial laboratories. In the 10th semester, "clinical boards" in prosthetics and restorative dentistry are given. The faculty at Turku shows a predilection to abandon this criteria as an unrealistic evaluation of the usual standard of practice. For the same reason they do not accept the concept of complete dental services for one "test patient" as part of the final examination. The faculty seeks a high standard of day-to-day competence.

Success in the series of examinations at the end of the 10th semester leads to the Licentiate in Odontology. The awarding of the degree is followed by a personal visit to the office of the State Medical

Board in Helsinki, the swearing of the Hippocratic oath, and enrollment on the register of dentists licensed to practice. There are no annual license fees. One additional educational requirement pertains to all persons using X-ray equipment; they must pass an examination based on the contents of a book of regulations published by the Institute of Radiation Physics.

The Finnish dentist may establish a private practice immediately after graduation. If he desires he can apply for permission to practice, for example, in the Swedish public dental health system, or in the other Scandinavian countries. The latter, at the present time requires examinations prior to granting the right to establish independent private practice. The Scandinavian Common Market will soon eliminate even this last formality. Regulations have been formulated, although not yet adopted, which grant reciprocity of practice in Finland, Denmark, Norway, and Sweden.

The foreigner who wishes to practice in Finland may do so by applying to the State Medical Board. The Board will refer the applicant to the dental faculty at the University of Turku or Helsinki for examination, the content of which is at the discretion of the dental faculty, and may be adapted in accordance with the qualifications of the applicant. Few dentists will take these examinations, for the Finnish language is difficult and lies without the framework of an "interscandinavian" idiom shared by the Norwegians, Swedes, and Danes.

Finland, with a population of 4½ million, largely centered in the Southern portion, has approximately 2,000 dentists. The dentist-to-population ratio is about 1:2,300 but varies from approximately 1:800 in Helsinki to 1:7,000 in the rural areas. Most of the dentists are educated at the Institute of Dentistry at Helsinki, established 60 years ago, and approximately 30 years ago moved to its present, surprisingly presentable quarters in a downtown building shared with other Institutes.

The Helsinki Institute graduates 70 dentists a year, and a new building with facilities to graduate 100-140 a year is at the top of the University building program. An extremely modern dental school is being constructed at Turku which will, interestingly enough, house the student general health service clinic and offices. The dental clinics are to be in a round, central-core, clinic building. Dental students are now being trained in temporary clinical quarters. Turku presently graduates 60 dentists a year. This will be increased to 70. The two

annual classes are admitted in September and January, and the clinics are run on a morning and afternoon shift. There is much discussion regarding the establishment of a new Dental Institute at Oulu in 1968, with a capacity of 40 graduates annually.

The inadequacy of the dentist-population ratio is accentuated because only one-fourth to one-third of the practitioners have dental assistants. The assistants have been trained by dentists, since there are no schools to provide such education. At present there is a motion in Parliament to establish a dental assistant training course at both Helsinki and Turku. A school for laboratory technicians was established five years ago in Helsinki. The laboratory training has no relation to the Dental Institute, although it is supervised by the Professor of Prosthetic Dentistry.

The State Medical Board favors the New Zealand plan of training dental nurses, but at present they are effectively opposed by the dental profession. The latter very much regrets that in 1964 a law was passed allowing laboratory technicians to attend formal courses and to be licensed to construct and deliver dentures to patients with healthy mouths. There has not been time to see the results in practice. Such a law may have been inevitable in a situation where rural dentists reportedly confine much of their treatment to extractions and prosthetics. There is a lack of appreciation for dental services among the people, and there is political pressure to provide dental services.

Since many dentists engage in prosthetics there is a desire to make it a specialty of dentistry in Finland. The overwhelming need for general dental treatment has precluded specialization. Illustrative of this is the fact that only twelve individuals engage in the limited practice of orthodontics. Furthermore, orthodontics and pedodontics have only recently been established as a Chair at the two dental schools. Oral surgeons practice in dental offices. At the University of Helsinki and Turku, oral surgery is performed on an out-patient basis as neither Institute has beds for oral surgery patients. About 20-25 beds are planned in the hospitals of each University. Maxillofacial surgery is performed by plastic surgeons.

The Finnish dental student receives competent training, but he enters a morass of problems in every day private practice. The dental health of people in the rural and Northern areas is appalling, and the general population does not obtain routine dental care for reasons

of economics, lack of health education, and perhaps lack of a dentist. The State Medical Board has not allowed generalized fluoridation pending the results of the addition of fluorides to the water at Koupio, a town of about 50,000 people. Fluoride levels in ppm range from .03-.10 in the North, to 0.1-0.3 in the South. Helsinki has 0.10-0.2, and Turku the same except for one well with 1.5 ppm. These are two of Finland's largest cities, and it is therefore not surprising that only 200,000 people live in a fluoride zone of 1 ppm. Even this concentration may not be optimal in Finland.

#### SUMMARY

There is recognition even at the governmental level that the dental profession at present cannot meet the needs of the population. Efforts to establish training courses for dental assistants have not as yet produced trainees, although a school for laboratory technicians was established in Helsinki. The Universities propose the building of facilities to train more dentists at the present high level of competency, the State Medical Board advocates two-level dentistry in the form of the New Zealand plan of dental nurses, and a recently passed law enables technicians to provide full dentures directly to the public. Conversely, the Board presently opposes widespread fluoridation of water supplies.

These observations were made during brief professional visits to Turku and Helsinki, and an American who is totally unfamiliar with local customs and practice may unwillingly misinterpret or inaccurately record facts, or otherwise bias his summation. The brevity of this report demonstrates that many facets of Finnish dental education are not mentioned, and virtually nothing of dental practice. However, two things are certain: dental education in Finland is at present progressive; secondly, the American dentist might well profit by observing the present and future relationship of the government and the organized profession of dentistry (including the Universities) in providing more dental treatment for the Finnish people.

<sup>(</sup>Appreciation is expressed for travel funds from Messrs. Hammasväline, Asemaaukio 2C, Helsinki, and grants-in-aid for travel from the Scandinavian-American Foundation and the American College of Dentists.)

People lose teeth; some have them replaced, some do not. Why is this? An interpretation of a 1959 NORC survey resulted in interesting data and statistics. Age, race, education, and income were characteristics considered. Regardless, a large part of the probability sample did not have all lost teeth replaced. Is this because people do not appreciate the need or know the value of replacing lost teeth? Is dental education and dental practice involved here?

## Replacement of Missing Teeth

ERWIN L. LINN, Ph.D.

PERSONAL behavior for dental health is usually measured by the frequency of professional dental care, the condition of the teeth and gingivae, or the kinds and extent of personal hygiene practices. A measure not yet documented in the literature is the replacement of missing teeth.

This article is about some characteristics of individuals pertinent to the likelihood that missing teeth are replaced. The findings are from interviews with a cross-section of the American public. We have compared persons differing by characteristics such as age, race, education, and income, in order to suggest what qualified whether they tended to replace missing teeth.

#### SOURCE OF DATA

The National Opinion Research Center of the University of Chicago generously allowed me the use of data collected in 1959 from a

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nation-wide probability sample of 1,862 adults, 20 years old and over (1). In this paper, only findings for the 1,663 white and 174 Negro respondents interviewed are included; there were not a sufficient number of "other races" for their separate consideration.

#### REPLACEMENT OF MISSING TEETH

Eighty-nine per cent of all respondents reported they had lost one or more of their permanent teeth, excluding third molars (2). Twenty-three per cent of all respondents reported they had lost all of their teeth. Findings about replacement among those who reported they had lost all of their teeth are discussed separately later. This section will be about the replacement of lost teeth for those who had lost some but not all (i.e. from 1 through 27) teeth, excluding third molars.

Among those who had lost some but not all of their teeth, 58 per cent reported none had been replaced; 15 per cent reported all had been replaced. A number of factors were studied for association with the probability that lost teeth were replaced. Of these, the most sharply associated were the number of lost teeth and income. Age, race, and education were also associated.

Number of Lost Teeth—With the exception of Negro men, the more teeth respondents had lost, the more likely were they to have replaced some or all of them (3). For instance, of the white men who had lost between one and nine teeth, 29 per cent had replaced some or all of those lost, whereas, of the white men who had lost between 10 and 27 teeth, 69 per cent had replaced some or all. There are similar findings for white women and Negro women (See Table 1).

The implication would seem to be that persons who had begun to lose their teeth tended at first to delay replacement, with the exception of Negro men, who tended to delay replacement until they

<sup>1.</sup> The study was directed by Louis Kriesberg and Beatrice Treiman. I am indebted to H. S. Horowitz of the Division of Dental Health for his critical comments.

<sup>2.</sup> Also see the Public Health Service, U. S. Department of Health, Education and Welfare, Health Statistics from the U. S. National Health Survey: Loss of Teeth. United States, July 1957-June 1958, and Bureau of Economic Research and Statistics, The American Dental Association, Survey of Needs for Dental Care (Chicago, Illinois: American Dental Association, 1954), p. 21.

<sup>3.</sup> All differences discussed, unless stated otherwise, are statistically significant. The standard of significance was that the difference would have arisen by chance in five per cent or less of samples drawn from the universe. The test used was chi square.

had lost all of their teeth. The greater likelihood of replacement, the more teeth that had been lost, holds regardless of income (See Table 3). Hence, delay cannot be only a matter of ability to pay for replacement. Either it reflects an indifference about lost teeth until a number large enough to interfere with eating or speaking was lost, or it reflects an attitude that additional loss is inevitable and can be taken care of later all at once, perhaps at a savings of time and money. If posterior teeth tend to be lost before anterior teeth, the findings could also reflect delay until there were teeth noticeably missing. We had no data, however, about the location and timing of loss of teeth to check for the influence of these factors on replacement.

Age—That people tend to delay replacement was also confirmed by a positive association between age and replacement of lost teeth.

TABLE 1

PER CENT WHO HAD REPLACED ALL, SOME OR NONE OF THEIR LOST TEETH, BY RACE, SEX, AND NUMBER OF TEETH LOST

HAD LOST BETWEEN 1 AND 9 TEETH\*

	White Men	White Women	Negro Men	Negro Women
Replaced	%	%	%	%
All	10	15	0	2
Some	19	20	14	9
None	71	65	86	89
Number of respondents who had lost between				
1 and 9 teeth	. 350	415	37	46

HAD LOST BETWEEN 10 AND 27 TEETH\*

Replaced	White Men %	White Women %	Negro Men %	Negro Women %
All	. 23	24	0	11
Some		51	17	50
None		25	83	39
Number of respondents who had lost between	3			
10 and 27 teeth	137	186	12	28

<sup>\*</sup> Third molars were not counted.

That is, the older respondents were more likely than the younger to have replaced some or all of their lost teeth. This is not a matter of the older respondents having lost more teeth in the first place; the association held when the number of lost teeth was also held constant. Nor is this association a matter of social status differences, particularly in ability to pay; it held for white persons when both income and education were held constant (See Table 2; income of respondents not shown, to simplify presentation). For the Negroes,

TABLE 2
PER CENT HO HAD REPLACED ALL OR NONE OF THEIR LOST
TEETH, WHITES ONLY, BY EDUCATION, AGE, AND NUMBER
OF TEETH LOST

HAD	Lost	BETWEEN	1	AND	9	TEETH*

	0-8 y	rs. of sch.		9	11 yrs. of	sch.	12 or	more yrs.	of sch.
Age		NONE RE PLACED %			NONE RE- PLACED %	(N) **		NONE RE- PLACED %	(N) **
20-44 year: 45 &		89	(55)	11	76	(100)	10	69	(319)
over	8	74	(110)	25	50	(52)	22	54	(108)

#### HAD LOST BETWEEN 10 AND 27 TEETH\*

	0-8 yr	rs. of sch.		9-	11 yrs. of	sch.	12 or	more yrs.	of sch.
Age		NONE RE PLACED %			NONE RE- PLACED %	(N) **		NONE RE- PLACED %	(N) **
20-44 years 45 &	_	29	(28)	10	45	(31)	22	24	(49)
over	20	38	(90)	40	9	(43)	34	18	(74)

<sup>\*</sup> Third molars were not counted.

<sup>\*\*</sup> The number in parenthesis is the number of cases from which the per cent that had replaced all or none of the lost teeth was computed. For example, out of 55 white persons, 20-44 years of age with 0-8 years of schooling and who had lost between one and nine teeth, two per cent had replaced all of their lost teeth, 89 per cent had replaced none of their lost teeth; the rest of the 55 white persons (nine per cent) had replaced some of their lost teeth. To simply the presentation the per cent that had replaced *some* of the lost teeth has not been shown; this per cent, of course, is the complement to the per cent replacing all and the per cent replacing none of the lost teeth.

there were not enough cases to control on either of these variables and also on age at the same time.

Income—Among white persons, the higher their income, the more likely were they to have replaced lost teeth. The association was independent of the number of lost teeth (See Table 3). Among Negroes, the differences by income level were not consistently in the same direction, were small, and were within the range of chance.

Education—Finally, the higher their education, the more likely were white respondents to have replaced lost teeth (See Table 2). The pattern is not, however, consistent. This association of education and replacement was independent of ability to pay (as measured by income) or age. Again there were not enough Negro respondents to check for similar findings among them.

Sex—The sex of respondents had a slight association with replace-

TABLE \$ PER CENT WHO HAD REPLACED ALL, SOME OR NONE OF THEIR LOST TEETH, BY RACE, INCOME, AND NUMBER OF TEETH LOST

WHITES WHO HAD LOST BETWEEN 1 AND 9 TEETH\*

Replaced	Income under \$4,000 %	Income \$4,000 to \$7,499 %	Income \$7,500 or more
All	. 8	11	21
Some	. 16	17	25
None		72	54
had lost between 1 and 9 teeth	. 205	365	188

	Income under \$4,000	Income \$4,000 to \$7,499	Income \$7,500 or more
Replaced	%	%	%
All	. 15	26	42
Some	. 52	50	35
None	. 33	24	23
had lost between 10 and 27 teeth	. 137	134	48

#### NEGROES WHO HAD LOST BETWEEN 1 AND 9 TEETH\*

Incom	e under \$4,000	Income \$4,000 or more
Replaced	%	%
All	2	0
Some	11	5
None	87	95
Number of Negroes who		
had lost between		
1 and 9 teeth	62	20

#### NEGROES WHO HAD LOST BETWEEN 10 AND 27 TEETH\*

Incom	ne under \$4,000	Income \$4,000 or more
Replaced	%	%
All	6	13
Some	36	49
None	58	38
Number of Negroes who		
had lost between		
10 and 27 teeth	31	8

<sup>\*</sup> Third molars were not counted.

ment. For whites, there were no differences between the sexes in the likelihood they had replaced lost teeth. For Negroes, only among those who had lost between 10 and 27 teeth was there a difference by sex; in this latter sub-group, Negro women tended more than Negro men to have replaced some or all missing teeth (See Table 1).

Whatever the reason for non-replacement of lost teeth, it is clear that a large proportion of the sample, regardless of their income or other characteristics, had not replaced all of their lost teeth (See Tables 1-3). Obviously, therefore, a large proportion had not been informed that replacement of all lost teeth is usually advisable, or were indifferent to this advice.

#### COMPLETE REPLACEMENT BY EDENTULOUS PERSONS

As noted earlier, 23 per cent of all respondents reported that they had lost all of their teeth. Of these, 94 per cent had replaced their lost teeth with two dentures (just one respondent claimed he had one denture only).

Regardless of their income, education, or age, edentulous respondents were not likely to try to do without dentures. Both income and education modified slightly, in the direction expected but within the range of a chance occurrence, whether or not edentulous respondents had dentures. That is, the higher income and the higher educated respondents were slightly more likely to have dentures than the lower income and lower educated respondents, respectively. Also, whites were more likely than Negroes, and women were more likely than men, to have dentures, but again the differences were small and within the range of samplying error.

#### TEETH VISIBLY MISSING

The National Opinion Research Center interviewers were asked to report at the conclusion of the interviews whether the respondent had visibly missing teeth. About 20 per cent of the white and 42 per cent of the Negro persons were so reported (4).

Education, income, race, and age were associated with the likelihood that visibly missing teeth were reported. The problem of interpretation of these differences by characteristics is that differences in visibly missing teeth reflect not only loss of anterior teeth but also replacement after loss.

Respondents were not asked how many front teeth they had lost or replaced. Consequently, to judge whether the tendency to lose front teeth or the tendency to replace them after loss accounts for the association of characteristics, such as education or age, with visibly missing teeth, we used the total number of teeth respondents reported they had lost. In using this measure, we assumed that the ratio of the total number lost to the number of front teeth lost would not vary (5) by the characteristics in which we were interested.

<sup>4.</sup> A potential bias in these interviewer reports could be that missing teeth might more easily be seen against the skin color of Negroes than whites. There was no indication of bias, however, to the extent that the interviewers noticed such defects. Interviewers were no more likely to report they had "not noticed" for Negroes than for whites whether or not teeth were visibly missing.

<sup>5.</sup> There was some reservation to this assumption since it could be argued that men, because they are more likely to participate in aggressive sports, to be in certain occupations, or in other activities, might be more likely than women to lose front teeth. For similar reasons, the lower educated men might be more likely than the higher educated men to have lost front teeth. We have no data but think that such differences in exposure to loss of front teeth would not be great enough to account for the differences found.

In short, we grouped respondents according to the total number of teeth lost and then checked for the association of race, sex, income, and education with the likelihood they had been reported to have visibly missing teeth. If we may infer from these findings differences in the likelihood that respondents had not replaced front teeth, then income, or the ability to pay for dental services, is the most relevant variable. In addition, education, probably as an indicator of manner of life and attitude toward dental appearance, has some influence (independently of income, at least for whites) on the probability that missing front teeth were not replaced. (There were not enough Negro respondents to check for the association of both income and education with the likelihood of visibly missing teeth, holding constant at the same time the number of lost teeth.)

The sex of respondents, as noted above, had little relevance to whether or not teeth missing anywhere in the mouth had been replaced. However, there was indication that among whites, women were *less* likely than men to be reported to have visibly missing teeth, when the total number of lost teeth was controlled (See Table 4).

#### SUMMARY AND CONCLUSIONS

There are several measures of the extent to which persons have taken care of their teeth and gums. A measure not yet considered in the literature is the replacement of missing teeth. Our interest was in the characteristics of persons which qualified whether or not they tended to replace some or all of their missing teeth. The data were from personal interviews with a nation-wide sample of 1,663 whites and 174 Negroes, 20 years or over.

To assess what characteristics of respondents qualified whether they tended to replace missing teeth, it was necessary to control in all analyses on the *number* of teeth that had been lost.

Persons who were older, higher educated, of higher income, or white were more likely than others to have replaced missing teeth. The sex of the respondent showed slight association with the likelihood of replacement.

Persons who had lost between 10 and 27 teeth were more likely to have replaced some or all of the lost teeth than were those who had lost between one and nine teeth. Older persons were also more likely than the younger to replace some or all lost teeth. These two find-

#### TABLE 4

## PER CENT WITH VISIBLY MISSING TEETH, WHITES ONLY, BY SEX, EDUCATION, INCOME, AND TOTAL NUMBER OF LOST TEETH

#### HAD LOST BETWEEN 1 AND 9 TEETH

	In 0-11 yrs.		nder \$5,000 12 or more yrs. of sch.		Income \$5.		,000 or over 12 or more yrs. of sch.	
	% with visibly missing teeth	(N) *	% with visibly missing teeth	(N) *	% with visibly missing teeth	(N) *	% with visibly missing teeth	(N) *
White Me	n 38	(77)	20	(45)	12	(77)	13	(143)
White Women	22	(95)	11	(81)	27	(59)	7	(150)

#### HAD LOST BETWEEN 10 AND 27 TEETH

	Inc		nder \$5,000 12 or more yrs. of sch.		Income \$5,		,000 or over 12 or more yrs. of sch.	
n	with visibly nissing teeth	(N) *	% with visibly missing teeth	(N) *	% with visibly missing teeth	(N) *	% with visibly missing teeth	(N) *
White Mer	n 73	(44)	62	(13)	42	(31)	37	(27)
White Women	58	(71)	26	(34)	36	(25)	20	(40)

<sup>\*</sup> The number in parenthesis is the total number of respondents for whom interviewers reported whether or not teeth were visibly missing plus those for whom they reported they had not noticed whether or not teeth were visibly missing. Excluded were respondents who reported they had lost all or none of their teeth.

ings indicate that persons delay replacement of lost teeth until they have lost yet more. The tendency to delay occurs generally, regardless of the income, education, race, or sex of the person.

Visibility of missing teeth introduced another condition: dental appearance. If the interviewers' reports were reasonably accurate, 20 per cent of the whites and 42 per cent of the Negroes had one or more visibly missing teeth.

There were no data about the number of anterior teeth that had

been lost or replaced, but holding constant the total number of teeth lost, we found that the higher income, higher educated, and white persons were less likely to have visibly missing teeth than others. Hence, the findings for visibly missing teeth were similar to those for all missing. In addition, among white respondents, there was some evidence that women were less likely than men to have visibly missing teeth, holding constant the total number lost.

The most marked of the findings were the association by income, the tendency to delay replacement of lost teeth until a larger number had been lost, and the relatively high per cent reported to have visibly missing teeth. Perhaps all of these findings were to be expected on the basis of insights from clinical practice. There is value to document them for a nation-wide sample and to indicate the persistence of the associations when other variables were controlled.

The tendency to delay replacing lost teeth may reflect the public's depreciation of the need to replace lost teeth or a lack of knowledge of the value of replacing them. If lack of knowledge is the reason, it may be due to dentists' qualifying their advice about such matters according to patients' ability to pay, their age, and the likelihood that they would be losing more teeth, all of which factors were associated with the likelihood of replacement.



## The American College of Dentists and Dental Education

HENRY A. SWANSON, D.D.S.

Education is a feature part of our portrait. Our future must either rise or fall depending upon acceptance of the discipline that education demands. There has been no retrogression, and steady advancement constantly has taken place. This has been due to the conscientious efforts of a score of individuals and groups.

Groups are made up of many individuals, and strength lies, not so much in numbers, as in dedicated, forceful, and dynamic leaders. The American College of Dentists is such a group. Its objectives, laid down over forty years ago, have been the foundation for a "Legion of Honor" recognized for its altruistic approach to the many facets of the dental profession. It is an "altruistic approach" for it carries a connotation of service, not self limiting but broad and visionary in concept and performance. The College is not responsible for decisions that must be made, nor for policies that should be adopted by the profession. It has, however, assumed a responsibility for study, research, and investigation of many problems in dentistry so that those who are responsible for policies under consideration may have the knowledge gained from the College activities.

The College has justified its existence in the activities it has pursued, and in the principles it has adopted for the improvement and advancement of the profession and the public welfare. Each Fellow in his own right has proved his individual leadership and, by joining with others in the College organization, has made the College outstanding in performance and successful in operation.

The College is interested in all phases of dental educational processes, from formal scholastic teaching on through the gamut of

This paper has been developed from a talk to the New England Section of the College, May 3, 1964, at Boston.

Dr. Swanson is a former President of the American College of Dentists, and is now Historian.

learning which gives depth and stature to an individual. The evolution of technical, cultural, and scientific knowledge is important to the College; its efforts are extended in many avowed and assumed responsibilities. I am going to discuss with you the part the American College of Dentists has played in some phases of dental education.

The objectives of the College relative to dental education are stated clearly in the Constitution:

- (a) 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;
- (b) To urge broad preparation for such a career at all educational levels;
- (c) To encourage graduate studies and continuing educational efforts by dentists.

These three provisions, newly revised, are geared to an educational system, well organized and under supervision of national accrediting agencies and the Council on Dental Education of the American Dental Association, both acting as accreditors of scholastic standards. It will be noted that the provisions are specifically directed toward improvement of the abilities of individuals for dental health services, and not toward matters concerned with the administration of teaching establishments.

The College was founded in 1920. Just prior to that time the profession was in the midst of changes concerning dental education, the status of dental schools, the curriculum, and the development of a more scientific approach to education. The educational objectives set down by the founders were two: to elevate the standards of the profession, and to encourage graduate study. The founders of the College were among the leaders in the profession during that period and were much concerned with what was happening and the problems involved. Three of the founders were from the New England area: E. A. Johnson and H. D. Cross, of Boston, and Albert L. Midgeley, of Providence. A statement at that time showed their concern:

... the enormously increased responsibilities of the dental profession to humanity on the one hand, the unprecedented opportunities for exploitation, which have resulted in a wave of mercenary practices that threaten to become a public scandal to the everlasting disgrace of American dentistry on the other hand, demand that those elements of the profession, whose character, reputation, and professional attainments point them out as

leaders, should be brought together for the purpose of checking the tide of destructive agencies and of encouraging by every laudable means the cultivation of that high spirit of professional social responsibility, the wholesome influence of which is so greatly needed.

Individual Fellows and the College as a whole were preeminently active in the changes that occurred, and what eventually happened had the support and endorsement of the College. The first accreditation of dental schools, the elimination of proprietary dental schools with their placement under university control, the requirement for predental education as a prerequisite for dental school entrance, are evidences of the efforts of several dedicated groups whose memberships were well represented by Fellows of the College. Dentistry needed an environment conductive to a thoughtful approach to problems without the direct responsibility of execution. The College undertook that role. Many subsequent studies have led to the advancement of dental education.

I want to note here a word about the management and administration of the College. The operation of the College is vested in and is the responsibility of (1) the Officers; (2) a Board of Regents; (3) a Board of Censors and local consultants; (4) a group of Committees and (5) the Sections. Studies and research are the responsibility of three of these; the Board of Regents, the Committees, and the Sections. The Sections are members of this triad although few of them have assumed, willingly or otherwise, any active part in such activities. A tremendous opportunity and challenge is there waiting the leadership of dedicated Fellows in the Section.

What has the College done for dental education? Would you agree that literature and journalism are important in education? Without it there can be little communication and opportunity for transmission of knowledge. In 1928, a College committee conducted a survey on dental journalism. The results of that survey suggested a change in the concept of dental journalism which eventually resulted in a set of principles for the selection of editors, principles for the control of dental journalism by the profession, and the principle of higher standards for the acceptance of advertising for dental publications. All of these have now been agreed on in principle in the adopted "Standards for Dental Publications" by the American Dental Association House of Delegates at Los Angeles in 1960.

The American Association of Dental Editors was established by

the College in 1931. That Association has been responsible for the increasing value of recognized dental publications, and has helped tremendously in solving many of the problems of dental journalism.

The College publishes its Journal—a quarterly, and the A.C.D. Reporter—a bi-monthly. The former, a journal of note, publishes articles pertinent to present day situations, written by persons of high qualification and authority. The latter is a more intimate publication, containing informative material covering current activities of the Committees.

A writing award for senior dental students was initiated to encourage writing. The need in this direction is recognized and an effort must be extended for the inclusion of "science writing" as a part of the curriculum in all dental schools. "The dentist who learns to write well learns to think more acutely and effectively about his profession, and through his writing contributes to better dentistry."

The Committee on Journalism has been a most important unit in the affairs of the College. The problem of effective communication becomes more important each day in this constantly advancing age of increased knowledge. In order to assure the scientific quality and professional excellency of dental journalism, the College has adopted the policy that it is necessary that dental periodicals must be published under authority and control of recognized dental organizations and demands that all Fellows agree and support that policy.

In 1960, the College published a book titled "The Evolution of Dental Education," by John E. Gurley, then historian of the College. This included a chronological history of the Dental Educational Council of America, the Dental Faculties Association of American Universities, and the reorganized Dental Educational Council of America. This was a valuable addition to dental history literature, and the College was proud to support and assume the responsibility for its publication.

In 1957, a study was undertaken relative to the "financial support necessary to enable the dental schools to function at maximum capacity and at the same time, maintain an education level that will have the respect of the profession as well as the educational institution of which the school is an integral part." This study was done at a period prior to government funding and at a time when most dental schools were in dire financial need to advance or increase their programs. At that time the basic operating income came

from sources none of which included federal funds, except the G. I. student fees. Whether or not we approve of funds from federal sources, the schools are now able to improve their facilities and administration because of it.

A brochure has been developed by a College committee titled "Suggestions For Fund Drives To Aid Dental Education." This served to call attention to needed funds for dental schools through the profession, dental alumni, philanthropic, and independent organizations.

Financial needs are an ever present problem in education, and it is important that the profession be made aware of its responsibility in supporting school administrators in their endeavor. To educate teachers qualified in proper academic teaching methods demands attention, and funds for this purpose are necessary. Most of our dental teachers are excellent, but education and training for such a duty is as important as primary dental education and training. The American Fund for Dental Education provides an opportunity for the profession to support financially dental education. As an alumnus, your interest and support, financially or otherwise, should be directed to the school from which you graduated.

One of the major problems in education is in the selection and recruitment of dental students. The College has stressed this need for many years, realizing that numbers are not the important factor. This has not been approached from the point of view of only scholastic abilities, but rather from the point of view of the need in our educational process for a reassessment and revaluation of the intellectual and moral potency of students in their approach to the status of professional individuals.

Dentistry's social characteristics, profile, image, portrait, or whatever, is dependent upon the inherent integrity and moral fibre of the entering student; the teaching, learning, and associations within the school; and the environment of living during the educational experience. What emerges will either enhance or depreciate that status. One of the great interests of the College lies in enhancing that status by creating an environment for thoughtful approach to methods that will improve the ideals of the profession and the status of those in it.

In 1957, a study on the motivation of prospective dental students was proposed by the Committee on Recruitment, and was undertaken in 1958. The College financed and supported this study. The

NK Associates, Inc. of St. Louis, an organization of personnel consultants, was engaged. "The basic purpose was to study the motivation, background, interest and nature of all entering freshmen in dentistry, to gain an insight into some of the problems of selection, recruitment and development of the dental profession."

The major study included a questionnaire to each student in all freshmen classes in dental schools of the United States and Canada, with a return of 3,610 out of 3,850 sent. Drs. Kohn and More of the organization visited 20 campuses and talked with 10 per cent of the seniors of that year and representatives of the faculties of the schools visited. Qualified college counselors, science teachers in major colleges, and approximately 500 predental students were also contacted. The coverage for this study was broad and basically sound.

The results of the survey were reported in the JOURNAL titled "The Dental Student" by Douglas M. More. Considerable information was gathered on the motivation and attitude of the dental student as an entering freshman. The report skillfully presented an evaluation, recorded in such a manner that those interested in counseling or recruitment might derive much benefit from it.

Four years later the Board of Regents of the College, believing that a follow-up study should be made on the dental graduates who were freshmen when the first study was made, directed the Nicholson-Kohn group to revaluate and reassess the seniors who were about to enter dental practice.

The results were reported in the Journal titled "The Dental Student Approaching Graduation—1962." Dr. More stated that "In all pregraduation years the student is learning how to become a professional man in two fundamental ways. He acquires the techniques, skills and knowledge to perform in practice. Secondly, he assumes the manners, attitudes, beliefs and behaviors that are intimately a foundation for a professional role. He must learn how to relate to others in face-to-face interactions—patients, colleagues, assistants and social groups outside practice—but always from the position of the dentist. The code of his calling needs to become ingrained in him so that it conditions his behavior without need of conscious attention. We suspect that failure to make the grade in professional schools may result as often from failure to achieve these vital attitudinal shifts as it does from failure to master the techniques."

From these latter studies it was evident that there was some change in the motivation for dentistry and the attitude of the student at the time of his graduation as compared with his entering as a freshman.

As a freshman the factors that influenced his motivation were:

The desire to work for and with people The desire to be his own boss Prestige of the profession Desire to work with his hands Monetary advantages of the profession

As a senior ready for graduation the factors were:

Bring relief of pain, reduce suffering and correcting ill health Capacity to be truly independent, running your own office, etc. Good income and material success
Able to turn out fine work with hands
Artistic pleasure in creating something beautiful and functional Sense of pride in applied biological science
Influence in a community based on professional prestige and status

It will be noted that one and two remain the same in both studies, that is the desire to work for and with people and to be independent. Monetary advantages moved into third position. There were two additions to the senior list, artistic creation and pride in biological science. The motive of service to mankind is however the outstanding one, and it is gratifying to recognize this trait for it should be the attitude of all health professional people. The College is proud of this contribution to dental education and if all dental students are properly selected, motivated, and educated to assume a true professional role there will be little danger but what the image of dentistry will remain at a high level.

Individual Fellows have participated actively in the planning and execution of recruitment programs in various areas. Two such states have been Missouri and Oregon. The Committee on Education has evaluated both of these programs and has recommended that any Section desiring information on recruitment give serious consideration to either one of them.

Education should not be self centered but should be the approach to greater knowledge which will eventually make one capable of many achievements. Shailer Peterson, Dean of the School of Dentistry, University of Tennessee, has said, "The education of the professional man must be planned to include attention to his training in the theory and principles, and the technics of his profession, and in

the utilization of the scientific method in attacking and solving problems important to the community and to the nation." It is for such reasons that the College has held many seminars and workshops on continuing education for the professional man, the most recent at the 1963 meeting in Atlantic City.

Should only the young continue to learn? What responsibility should be assumed by the university, the dental school, the dental organizations, the State Departments of Health? What should be the baseline in this effort? What should you do? The answers to these questions were presented at Atlantic City, and the December 1963 JOURNAL carried the report of the meeting.

Baselines for continuing education were developed by a committee of the College in 1958, and are available in a brochure titled "An Outline For A Continuing Educational Program For The Dental Profession."

The College has a teacher training fellowship available to anyone who is seriously interested in teaching as a career. The need for teachers in the expanding educational program is of paramount importance, and recruitment could well be extended to include those who have teaching abilities and a motivation in this direction.

The need for increased dental health care can only be met when we have well qualified and well trained auxiliaries to support and complement well trained and well educated dentists. The College has supported, and over many years has recommended advances in these training programs. As I previously stated, the College is not responsible for the policies and programs that must be adopted, but is ready at all times to study and undertake research problems that face the profession and that need answers.

One of the newer projects undertaken by the College is the Institute for Advanced Education in Dental Research under the direction of the Committee on Research. This has exciting possibilities. The opportunity and challenge for a broader understanding of the many needed research problems in dentistry has been made available through the Institute. There should be no limitation in thinking and no background of precedence to hinder its development.

The purpose of the Institute training program is to bring "promising researchers in dentistry into intimate contact with senior scientists who are making significant contributions to the field. . . . It is felt that such an Institute will provide a unique way to acquaint

younger investigators not only with some of the more promising newer techniques for research in dentistry but, more importantly, with methods of thought and work of those experienced men who have contributed to the creation of these techniques and to their application." The first annual session consisting of two periods was held in 1963, and has been continued into 1966. Subsequent sessions are being planned.

When one realizes the vast potential of reseachers in fields either closely allied with dentistry, or as it appears at present somewhat remote, there is no limit to what may develop in the processes of learning and study in the environment of the Institute. The College is proud of its part in the sponsorship and support of this new field in education. Through financial support the College made it possible for the preliminary study concerning the feasibility of such an endeavor and is now aided in the undertaking by a grant from the National Institute of Dental Research.

Operation Bookshelf, with which you are cooperating, is still in operation although there is at present a problem of out-of-country distribution. Funds that were made available by the Agency for International Development (AID) for the distribution through the United States Book Exchange, Inc. have been curtailed due to lack of federal appropriations. It is expected that a full contract will be renegotiated in the very near future. Another possible source of distribution is being investigated through the U. S. Navy program called "Operation Handclasp." The Navy in 1960 initiated this program for the collection and distribution of all kinds of goods and materials on a personalized basis, to foreign areas of need. Dental literature is considered acceptable for this program.

Would you say that the American College of Dentists is only an "honor society," or do you believe that it serves a most useful purpose in building and enhancing the image of dentistry? What it has done for dental education can be matched in the fields of research, public health, social responsibility, and in other phases of professional activity.

As Fellows of the College we are charged with the responsibility that demands our whole-hearted attention not only to our profession, but as citizens we owe much to our community, our state, and the nation. May it never be said that we have failed this responsibility.

C. N. Johnson, a charter member of the College, once stated: "The

greatest need of the hour is not so much the consumation of a better technique—it is to save the soul of dentistry, to preserve the ideals and ethics of our profession—to prove the faith that is in us for the maintenance of a high ethical concept that will create a sharp distinction between our policies as a profession and the practice of the market place."

The American College of Dentists is in complete agreement with that statement.

#### DENTAL MANPOWER AND DENTAL CARE

In January, 1964, there were about 190 million people in this country, wherein approximately 114 million or 60 per cent received only emergency dental care, if any. By January, 1965, three million additional people were added to the population, and our national population will continue to increase three million and more each year in 1966, 1967 and so-on in the future. This means, too, that about 60 per cent of the three million newcomers each year or 1,800,000 will receive little, if any, dental service, providing that the dentist:population ratio nationally remains the same (about 1:2000), the national economy is not altered significantly, providing that the productivity of the average dentist remains the same, and that legislation at the federal and state levels do not accelerate the demand for dental treatment. The stark realities are that this country is not producing enough dentists annually to maintain the 1:2000 ratio, since only a few new schools have been activated in the past five years, and relatively few existing schools have expanded their facilities.—Comment by John C. Brauer, dean, School of Dentistry, University of North Carolina, from an address to the Illinois State Dental Society, May 1964.

# Barriers in Dental Practice—

## Architectural and Structural

MAX LEO BRAMER, D.D.S.

TWENTY million in the United States are physically handicapped—one out of every seven Americans! The same recognition and privileges must be extended to these people as they are to others. The handicapped are not now receiving the same medical and dental privileges as others, due to a lack of planning that has contributed to architectural and structural barriers which confront them in medical and dental clinics. As a result, a large number of the handicapped are unable to realize the full value of dental services.

These barriers are real, and exist in most health areas. They cause daily problems for many with handicaps such as the:

5,000,000 persons with heart conditions 250,000 persons in wheel chairs 20,000 in heavy leg braces 260,000 blind people persons over 65 in need of easier access to public buildings

Our professional schools have not examined sufficiently the existing, inadequate medical and dental conditions related to this problem. Yet, the United States Department of Health, Education, and Welfare has recognized them. Last year eleven grants were given to undergraduate schools for a study of the technical difficulties in treating the physically handicapped under present circumstances. An evaluation of these studies is to be made by the American Association of Professional Schools.

The American Institute of Architects has shown interest in this problem. Based on research conducted at the University of Illinois,

Dr. Bramer is editor of the Bulletin of the Academy of Dentistry for the Handicapped, and has several hospital appointments in Chicago.

the Institute made recommendations for standards in future construction of all medical and public buildings. Suggestions for standards include:

Grading of ground to normal entrance level.

Public walks at least 48 inches wide with a grade no greater than 5 per cent. Extra wide spaces in all parking lots for persons with wheel chairs, braces, or crutches.

At least one entrance in every building to be used by persons in wheel

Ramps with a gradient of not more than 1 foot in 12 feet, or 8.33 per cent. Stair risers of not more than 7 inches.

At least one hand rail on each stair extending 8 inches beyond both the top and bottom stairs.

Light weight doors not less than 32 inches wide with thresholds as nearly level with the floor as possible.

Floors with non-slip surfaces.

Toilets with at least one stall wide enough for a person in a wheel chair. Water fountains, public telephones, controls for lights and heat, fire alarms, etc., at a level convenient for a person in a wheel chair.

Accommodation to the needs of this group of neglected people can be made in building and facilities which are used without impediment by physically sound individuals. Such adaptations can be made with no loss of space and at no extra cost. Further, experience shows that physically sound persons feel safer and more comfortable in structures which include the above mentioned standards.

#### MODERNIZATION OF DENTAL FACILITIES

If at all possible, first floor offices should have a street level door. In multifloored buildings, self-service elevators should be installed and doors should be widened to accommodate wheel chairs and stretchers. All walls should be made wide enough for patients in wheel chairs, or those with crutches, to facilitate relative freedom of movement. Floors must be safe and smooth for leg braces and crutches. Care should be taken that there are no obstructions extending into the pathways.

Dental chairs should be remodeled carefully. They could be on slides so that wheel chairs can be substituted and moved to the side of the dental unit. The chair has to be mobile so that a patient can be placed easily in it. There must be maximum adjustability of position to support spastic or rigid individuals in a comfortable position. All chairs, ideally, should be equipped with safety straps to prevent the patient from falling out of the chair in a reflex movement.

Equipment should be available to aid cardiac respiratory patients so that breathing is not impaired. Oxygen and other resuscitating equipment is a must.

Sedation is an acceptable procedure in modern dentistry; recovery rooms should be properly equipped to aid handicapped patients.

#### ADDITIONAL FACILITIES

Additional aids are intended to safeguard the dentist and provide greater comfort and protection for the patient:

1. Mouth props: wood, rubber, adjustable

2. Finger protection: flexible and ordinary thimble

3. Restraining straps: broad canvas strips fastened to rear of chair

4. Sand bag weights for knee and body

5. Accessory head rests clamped to chair arm

6. Suction equipment adequate to relieve and remove heavy, ropy saliva

7. Pre-medication; transportation facilities to enable the patient to be taken to hospital in emergencies; and knowledge of hospital procedures.

It is noted that the problems and approaches suggested reflect the emergence of new challenges and a new image in modern dentistry. With the advent of fluorides and similar treatments, cavitation will be lessened greatly, allowing the profession to redirect attention to disorders and conditions such as speech defects, cleft palate, etc.

To sum up: Millions of Americans are physically handicapped. Health facilities are difficult for them to utilize, because of the obstacles created by present architectural defects and equipment restrictions.

Organizations such as the United States Department of Health, Education, and Welfare; the National Society for Crippled Children; the Cerebral Palsy Association; and the American Institute of Architects are concerned about this matter.

Our dental schools and our dental societies must accept greater responsibility in studying and correcting this unfortunate situation.

Accommodation can be provided for the handicapped in our present facilities at minimum cost and loss of space. The changes would actually provide greater comfort for the physically sound as well. Coordinated planning in construction of health facilities and a re-examination of present procedures could render the handicapped equal to the physically sound in opportunity to receive the benefits of advanced medical and dental knowledge.

## Needed:

# A Counseling and Placement Service

ALBERT L. BORISH, D.D.S.

For the man with a diploma in his hand after six, seven, or eight years of schooling;

For the man returning from the armed services, or following a graduate program;

For the man in practice one, two, three, or even more years, languishing in an area showing no promise of development;

For the man with an excellent practice much too much for one man, looking for an associate and ultimately a partner; and

For the man definitely resolved that he needs and wants additional practitioners to staff his large practice.

Every statistical picture pointing to five, ten, or more years hence, shows a population explosion outgaining the supply of dentists. The obvious solution is expansion of the merchandising processes—enlarge the dental schools and graduate greater numbers of dentists each year. This is not possible without federal assistance. That process will take much time; each year of delay only adds weight to the problem.

Each graduating class delivers men of competence in operative procedures but rather less prepared in methods of diagnosis, treatment planning, and more important, in case presentation with a fee schedule. All too frequently he is lost in the selection of a site, and his fitting into a community. Shall he seek employment, the armed services, an internship, public health service, or shall he accept the challenge to initiate a practice of his own? He may try one or more of these, notwithstanding the loss of time in seeking his niche.

This loss of time is too costly to the nation awaiting his skills. The growing population, the thousands of communities—rural and even

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urban—are being shortchanged while this valuable and well trained dentist flounders as he seeks answers.

Another "lost soul" is the man returning from the armed forces. He has enjoyed, for the most part, two years of traveling, working at his profession, and sometimes vacationing. His two years might well be worth five years of private general practice. Now he is on his own; in most cases with a family. Where does he go from here? In a similar category is the man just completing a graduate program. He is prepared and ready to limit his practice. But where, or with whom?

Too many of the dental population droop in areas where they do not belong. There are any number of many reasons for this; this is not important. Of greater importance is that this must not be. This practitioner must be encouraged to seek a change.

Less and less is being done for more and more patients in the oneman office where two or more practitioners are needed. For the most part this one-man doesn't know where to seek an answer. He is too busy to attend dental meetings or continuing education programs. He does manage to take a vacation of a few weeks, but often finds himself too tired to really partake in his holiday.

Finally, there is the man who is well aware that his practice requires additional professional staff. He knows what he wants, but he does not know where to seek it. He may be one of those who join others in using the "Classified"—in journals and other periodicals. He may receive some replies, revealing either too little or too much. This method rarely satisfies, and more than this, it is unprofessional. It either brings a tale of a recent widow, or calls on a candidate with one or more state licenses in his pocket, or describes an "opportunity" that awaits at the end of the rainbow. This does not add to the professional image. Much could be accomplished were the source and resource brought together immediately by a counselor!

From the demands described, a counselor might well be a combination of men, who should know the student, the graduate-trainee, the practitioner not nearly as successful as he should be, and the successful dentist who might further his successes and help others while doing so. A counselor might be placed in each of the many dental schools, or he might reside in a towering office building.

Dentistry, ever expanding and ever demanding in a dynamic climate of advancement, now has a full-time role for a counselor—if the profession is to use every bit of its valuable and skillful manpower.

This is a companion paper to one the authors wrote for the JOURNAL in January 1965. At that time they reported basic data on dentists' participation in refresher courses. Now they show some of the characteristics of dentists who continue their education by means of short courses. It should be noted that these data were collected a few years ago, and that since then enrollments in short courses given at dental schools have increased markedly. It is unlikely, however, that the characteristics as reported here have changed much.

# Taking Refresher Courses: Some Related Factors

ROBERT M. O'SHEA, Ph.D.,\* SHIRLENE B. GRAY, B.A.\* and BEATRICE TREIMAN, A.M.\*\*

HANGE has been so rapid in dentistry that continuing education has become a necessity and a challenge to the practicing dentists, and a major concern to the profession. Unless the dentist realizes that education for his profession is a lifetime experience, and makes a determined effort to continue to learn of the advances in his profession, he is likely to render limited services to his patients. The dentist is not the only health practitioner who faces this problem. Health practitioners have put the matter succinctly, "Even the best education in the health professions can become obsolete in five years

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unless the practitioner makes a very determined effort to continue his education" (1).

To many dental educators, one of the most rewarding ways for the dentist to keep abreast is by taking refresher courses (2). These are "single courses of short duration (for two days to several weeks on either full time or intermittent basis), which provide the practicing dentists with information about new developments in dental techniques and the science of practice" (3).

This paper will show some of the characteristics of dentists who continue their education by means of these refresher courses. The data are from a 1957 survey by the National Opinion Research Center, University of Chicago, of 758 dentists who constituted a representative 1 per cent sample of American dentists actively engaged in private practice (4). Hopefully, knowledge of the differences between those who continue to learn and those who do not will aid educators in planning and conducting short courses.

Over three-fifths of the dentists in the survey had taken at least one refresher course at some time in their careers; 44 per cent had taken them in 1956-1957, the 18 month period before the survey; the most popular course subject was prosthodontics; and the most popular sponsor was the dental or medical school (5).

#### LOCATION OF DENTIST

The geographical region where the dentist practiced was associated with whether he took courses, but not how recently he took them. Tables I (a) and I (b) show the data by region. Dentists in the West and East were more likely to take courses than dentists practicing in the Central states and the South. The differences in proportion taking courses between the highest and lowest regions were considerable; 70 per cent of the dentists in the West said they had taken one or more short courses, while only 43 per cent of those in the South said so. However, recency of course taking was not affected by region.

The size of the dentist's community was also examined but, when regional location is controlled, differences in course taking and in recency of attendance seem slight or are inconsistent between large metropolitan areas, small metropolitan areas, urban county and rural county areas.

TABLE I (a)

RELATION OF REGIONAL LOCATION TO TAKING REFRESHER COURSES

		al Location		
	WEST	EAST	CENTRAL	SOUTH
Per Cent Taking				
One or More Courses	70	66	61	43
No Course	30	34	39	57
Total Per Cent	100	100	100	100
No. of DDS Answering	(98)	(233)	(223)	(138)

	Regional Location					
	WEST	EAST	CENTRAL	SOUTH		
Per Cent Taking Courses in						
1956-1957	43	50	38	39		
1955 and before	57	50	62	61		
Total Per Cent	100	100	100	100		
No. of DDS Answering	(67)	(127)	(130)	(57)		

The dentist's nearness to a dental school was also examined as a factor in taking courses. Dentists within a 25 mile radius of a dental school were somewhat more likely to have taken a course; 68 per cent of those within 25 miles of a school had done so, as compared to 57 per cent of those outside this radius. Proximity to a school, however, had no effect on how recently the dentist had taken a course.

#### AGE

The dentist's age was associated with his taking refresher courses, and how recently he had taken them. The older the dentist, the more likely he was to have taken courses but, the younger the dentist, the more likely he was to have taken them recently (in 1956 or 1957).

Thus, 70 per cent of the older dentists (those 60 years of age or older) had taken courses, while 56 per cent of the younger dentists

(aged 25-44) had done so. The figures for recency go in the opposite direction: 57 per cent of the younger men had taken courses recently, while 31 per cent of the older men had done so.

This could reflect the simple fact that older dentists have had a longer time in which to take courses, and perhaps also that the most course taking is done earlier in a dentist's career.

#### INCOME

The dentist's current income was also associated with whether he had taken refresher courses and whether he had taken them recently. Dentists in the higher income brackets were much more likely to have taken courses and to have taken them more recently than those in the lower income groups.

Thus, 70 per cent of the dentists in the highest income group (annual income of \$15,000 or more) had taken one or more courses, compared with 50 per cent of those in the lowest group (less than \$5,000). Likewise, 51 per cent of those in the higher income group who had taken courses had taken them recently, while only one-fourth of low-income dentists who had taken courses had taken them recently.

In interpreting this relationship between income and course taking, we believe that higher incomes lead to course taking rather than vice versa since the brief nature of the courses could hardly account for appreciably higher incomes. It may be that the more successful dentists can better afford to be absent from their practice, or that the same kind of people who have the motivation to continue learning have the motivation to be financially successful as well. There may be other explanations.

Since the dentist's age and his income are obviously related, we looked at the two factors simultaneously to see how each related to the taking of courses and recency. The results show that, in the main, income and age operate independently in affecting course taking. Thus, for each age grouping, the higher the income, the greater the likelihood of having taken courses; and, for the same income grouping, the older the dentist, the greater the likelihood of his having taken courses. The range of proportions of dentists taking courses ran from 45 per cent for the men aged 25-44 earning less than \$5,000, to 86 per cent of the dentists 60 and over with incomes

of \$15,000 or more. An exception to these trends is middle aged dentists, for whom income seems less related to taking courses (Table II).

The recency of having taken courses shows a less definite picture. Age is associated with recency and, when age is controlled, income does not seem relevant. In general, more of the men aged 25-44 took courses recently than did older dentists (Table III).

TABLE II  $\begin{tabular}{ll} \textbf{RELATION OF THE DENTIST'S AGE-INCOME TO TAKING } \\ \textbf{REFRESHER COURSE} \end{tabular}$ 

		Age an	d Inco	me				
	25-44			45-59			60-PLU	s
Low	Med	Hi In- come	Low	Med	Hi In- come	Low	Med	Hi Income
Per Cent Taking								
One or More								
Courses 45	54	66	67	62	71	59	71	86
No Course 55	46	34	33	38	29	41	29	14
Total Per Cent 100 No. of DDS	100	100	100	100	100	100	100	100
Answering (88)	(217)	(105)	(90)	(74)	(84)	(74)	(28)	(21)

TABLE III  $\begin{tabular}{ll} \textbf{RELATION OF $AGE$ $AND$ $INCOME$ TO HOW RECENTLY HAD TAKEN } \\ \textbf{REFRESHER COURSES} \\ \end{tabular}$ 

			Age an	d Inco	me				
		25-44			45-59			60 PLU	S
		Hi In-			Hi In-				Hi In
	Low	Med	come	Low	Med	come	Low	Med	come
Per Cent Taking		4							
Courses in									
1956-57	55	54	59	31	43	36	17	53	33
1955 and before	45	46	41	69	57	64	83	47	67
Total Per Cent No. of DDS	100	100	100	100	100	100	100	100	100
Answering	(40)	(68)	(69)	(58)	(44)	(58)	(41)	(19)	(18)

#### Type of Practice: General-Specialty

Continuing dental education by refresher courses was also associated with the type of dental practice. Dentists in specialty practice were more likely to take courses than those in general practice. Thus, 86 per cent of all specialists had taken courses; 60 per cent of general practitioners had done so. Among the specialists, more orthodontists had taken courses than had those in any of the other dental specialties.

Specialists were also more likely than general practitioners to indicate that they had taken courses recently. Sixty-eight per cent of specialists had taken their courses in the previous year and a half, while only 40 per cent of the general practitioners had done so.

Perhaps one explanation for these differences is that specialists are faced with greater demands to keep current and increase their knowledge.

#### PRACTICE ONLY VERSUS OTHER WORK IN DENTISTRY

Although most of the dentists had spent their time in practice only, those who had engaged in teaching and/or research as well were more likely to have taken refresher courses than those who had practiced only.

Thus 81 per cent of the dentists with some research background had taken courses; 78 per cent of those teaching had taken courses; while 60 per cent of those who had done neither only had taken courses.

In addition, the dentists who had these other dental experiences were more likely to have taken courses recently. Those with research experiences were most likely to have taken a course recently; those with teaching experiences were next. The data showed that 62 per cent of those with research experience had taken a course within the last year and a half; 51 per cent of those with teaching experience had done so; and 42 per cent of those in practice only had done so.

This finding fits in well with an image of the teachers and researchers as being more interested in advancing their personal knowledge of dentistry, as well as being in positions that make continuing education almost mandatory, both because of the demands of their activities and the expectations of their colleagues. These men also are more likely to have access to training.

# DENTISTS' BELIEFS ABOUT THE MOST IMPORTANT WAYS IN "KEEPING UP"

"Postgraduate and refresher courses" were rated by about one-fourth of all dentists as one of their most important ways of keeping up with new things in the field of dentistry. Those dentists believing short courses to be a most important way for them to keep up were indeed much more likely to take refresher courses than those who believed that various other methods were the most important ways. In fact, 88 per cent of those saying postgraduate and refresher courses were the most important methods had taken one or more courses (Table IV).

Similarly, these dentists had also taken courses more recently than those who favored the other ways of keeping up (Table V).

These data show the expected: that dentists, like people in general, tend (a) to engage in activities that they feel will be most effective in producing the desired result and, (b) to engage in these activities

TABLE IV

RELATION OF OPINION ON THE MOST IMPORTANT WAYS TO KEEP UP WITH NEW THINGS IN DENTISTRY TO TAKING REFRESHER COURSES

		Most	Importan	t Ways t	o Keep L	J p		
	MEETINGS, CONVENTIONS	POSTGRADUATE, REFRESHER COURSES	STUDY GROUPS	DENTAL PUBLICATIONS	DENTAL, MEDICAL AFFILIATION	COMMERCIAL	INFORMAL CONTACT	READING, TV, OTHER
Per Cent Ta	aking							
One or More								
Courses	63	88	74	60	71	48	68	73
No Course	37	12	26	40	29	52	32	27
Total								
Per Cent	100	100	100	100	100	100	100	100
No. of DDS								
Answering	(573)	(179)	(68)	(561)	(24)	(48)	(40)	(67)

TABLE V

RELATION OF OPINION ON THE MOST IMPORTANT WAYS TO KEEP UP WITH NEW THINGS IN DENTISTRY TO HOW RECENTLY HAD TAKEN COURSES

		Most 1	mportant	Ways to	Keep L	Tp .		
	MEETINGS, CONVENTIONS	POSTGRADUATE, REFRESHER COURSES	STUDY GROUPS	DENTAL PUBLICATIONS	DENTAL, MEDICAL AFFILIATION	COMMERCIAL SOURCES	INFORMAL CONTACT	READING, TV, OTHER
Per Cent Ta								
Courses in 1956-1957	43	63	56	37	56	27	50	53
1955 or before	57	37	44	63	44	73	50	47
Total Per Cent	100	100	100	100	100	100	100	100
No. of DDS Answering	(348)	(152)	(48)	(329)	(16)	(22)	(26)	(47)

more frequently than those who feel that other activities are of greater value. The indicated task for proponents of continuing education seems to be to first change the evaluations of three-fourths the dentists so that they may hold short courses in more importance than they now do.

It is also worth pointing out, however, that more than a third of these dentists who most esteem refresher courses had not taken any recently.

#### USE OF OTHER MEANS TO "KEEP UP"

Dentists who used other means of keeping up (such as graduate, hospital courses, study groups, etc.) were also more likely to have taken refresher courses, and to have taken them more recently than those who had not used other means. This implies that refreshers are not an isolated means but part of a total program used by dentists who keep up in general.

- (A) Graduate or Hospital Training Courses—Eighty-seven per cent of the dentists who had taken formal graduate or hospital training courses also took refresher courses, while only 56 per cent of those who had not taken graduate courses had taken refreshers. In addition, dentists who had taken graduate courses were also more likely to have taken refresher courses more recently than those who had taken graduate courses. Thus, 61 per cent of those taking graduate/hospital training courses had also taken refreshers recently; only 38 per cent of those who had not taken formal courses had taken refreshers.
- (B) Professional Meetings, Informal Study Groups, Informal Clinic Sessions, Etc.—Sixty-four per cent of those who had attended at least one meeting, study group, etc. had taken short courses, compared to 55 per cent of those who had not so participated. The recency difference is more striking; 49 per cent of the dentists who had participated in meetings, study groups, etc., had also taken courses recently, but only 16 per cent of those who had not participated in these activities had taken short courses recently. It is worth noting that not all of these ways of continued learning were equally associated with taking short courses. Attendance at local, state, and regional meetings were less related to course taking than was participation in study groups. Study group participation was also most closely associated with recency of taking short courses.
- (C) Memberships in Dental Societies—One of the traditional ways in which a dentist can continue to learn is to become active in his professional society and participate in its programs. Ninety-five per cent of all the dentists reported that they did belong to one or more general or specialty dental societies. Among those who were members, 63 per cent had taken one or more refresher courses; only 47 per cent of the non-members had taken courses. What was most striking, however, was that the more societies these men belonged to, the more apt they were to have taken refresher courses, and the more likely to have taken them recently.

Thus, 85 per cent of the dentists belonging to four or more societies had taken courses, while only 58 per cent of those who belonged to one or two dental societies had taken courses. Furthermore, 59 per cent of the dentists belonging to four or more dental societies had taken courses recently; only 41 per cent of those who belonged to one or two dental societies had done so.

#### MODERNITY

From a social science point of view, dentistry may be seen as a set of specialized techniques and procedures and also a set of norms and attitudes about how its armamentarium ought to be used. One set of dental norms is "being modern," which may be described as a style of practicing preventive, whole-mouth, systemic dentistry; using auxiliaries efficiently; using the latest equipment; and keeping up with the field.

We should expect then, that "modern" dentists also take more refresher courses than dentists who are "not modern." The data support the expectation.

- (A) Auxiliary Aides—If we take use of auxiliaries as one indication of being modern, we find that 72 per cent of dentists with two or more aides had taken courses, compared to 53 per cent of those with no auxiliaries. Similarly, 54 per cent of dentists with several auxiliaries had taken courses recently, but only 32 per cent of those without auxiliaries had done so.
- (B) Preventive Practice—If we take use of preventive procedures (6) as an indicator of a modern orientation, we find the same relationship. Thus, 72 per cent of dentists who scored high on preventive procedures had taken courses, while only 54 per cent who scored low on preventive procedures had taken courses. And 45 per cent of dentists with high preventive scores had taken courses recently, as compared with 35 per cent of the dentists with low preventive scores.
- (C) Equipment—The trend is the same if we take as an indicator of modernity the amount of various dental equipment (operating stools, high speed drills, water-cooled drills, X-ray machines, autoclaves, sterilizers) possessed. The more equipment the dentist had, the more likely he was to have taken courses and to have taken them recently.

Thus, 69 per cent of the dentists with all six items of equipment had taken refreshers, compared to 54 per cent of those with two or less equipment. Furthermore, 60 per cent of those possessing all six items had taken refreshers recently; only 24 per cent of those with two or less items had taken refreshers.

In general, each of these indicators of "modernity" was independent of age as a factor in taking short courses so that young, middle aged, and older dentists might be modern or not and, if modern, they were more likely to have taken a course, and to have done so recently.

(D) Unrelated Factors—Some apparently relevant characteristics were not associated with whether the dentist had taken refresher courses or how recently he had taken them. Four such characteristics were: The dentist's satisfaction with his income, type of practice arrangements, retirement plans, and office location.

#### DISCUSSION

What might these various findings suggest? An obvious one is that since short continuation courses do not reach enough of the men longest out of school, some special effort must be made to involve dentistry's senior practitioners. Perhaps alumni associations might sponsor special school seminars for updating their members at say their 25, 30, 35 and 40th anniversaries of graduation.

It would also seem that an increased effort might be made to involve young dentists in continuing education right from the start. Perhaps the dental faculty and dental associations could join forces to introduce new graduates to continuation programs. Data from a study of junior and senior students in 15 dental schools indicate that few students attend the meetings or symposia or study groups of the local dental society (7). If some kind of bridge could be built to continuing education during undergraduate days, the lifetime education habit might then be facilitated.

The fact that more specialists than general practitioners keep up through short courses suggests the need for stress on the growth of dentistry and on the relevance of research and development for ordinary practice.

Since doing some teaching and research seems to promote interest in continued learning, it might be useful if general practitioners could be further involved in these activities. If more dental students were taught to do research, and were taught that some research was expected of the ordinary practitioner, their later continuing education would doubtless benefit.

The fact that not all dentists highly value short courses suggests several things. For one, the schools need to impress undergraduates with the value of such courses. Also, the faculty of short courses might benefit from teacher education since, over the long run, the quality of short courses will affect their attendance.

Since "modern dentists" are more likely to take short courses than those who are not, we might infer that, to some extent, keeping up is part of a larger psychological package, and that perhaps the best way to promote short courses is to promote the total package. Educators and others in the profession might do well to convince their audiences to be modern practitioners. The commitment to be modern will include the commitment to keep taking courses.

#### **FOOTNOTES**

1. President's Conference on Metabolic Disease. Referred to in "Responsibility of the Practitioner and the Dental Educator in Continuing Education," presented by William R. Patterson, at the Workshop on Continuing Education, Chicago, Dec. 9-11, 1963.

2. Patterson, William R. Continuing education: a challenge to the profession.

J. Am. Col. Den. 27:3-26, March 1960.

3. Burket, Lester W. The responsibility of the dental educational institutions for offering continuing education programs, presented at the Workshop on Con-

tinuing Education, Chicago, Dec. 9-11, 1963.

4. This survey has been reported by the National Opinion Research Center, University of Chicago, in Report No. 69, "Factors associated with preventive dental practice." Mimeographed, March 1959. Information was gathered by personal interview that averaged approximately one-and-one-half hours. The completion rate was 87 per cent. We wish to thank NORC for permission to use their data for this paper.

5. O'Shea, Robert M. and Black, Shirlene. Short courses for dentists: some

survey results. J. Am. Col. Den. 32:32-41, Jan. 1965.

6. Dentists were scored on these preventive practices. NORC selected five procedures as an index: (1) uses X-rays routinely; (2) uses laboratory or chemical tests; (3) cleaning and polishing done routinely; (4) recall system covering all patients; and (5) gives or recommends fluoride treatments.

covering all patients; and (5) gives or recommends fluoride treatments.
7. Unpublished data from "Future practice plans," a study of 15 dental schools, 1960-61, Social Studies Branch, Division of Dental Public Health and

Resources, USPHS, HEW.



# Factors Affecting the Dentist-Patient Relationship

PAUL E. JAFFE, D.M.D.

The dentist-patient relationship and professional service can be affected by certain patient pressures and problems. These must include divorce, death in the family, prolonged chronic illness, or sudden changes in family income, to mention but a few. "It is true, of course, that between doctors and some of their patients certain impediments to mutual understanding have always existed—differences in vocabularies, intelligence, social position, education, and the type and amount of medical information. Some patients have odd notions about anatomy, physiology or simple diseases. Better informed patients often demand specific treatment or new drugs they have heard about, demands that are sometimes brusquely dismissed in an atmosphere of mutual annoyance."\* It would therefore be helpful to consider the impact of such factors on both our patients and our mode of practice.

The patient selects the dentist on the basis of recommendation and personality. The patient's ability to determine the technical competence of the operator or the quality of the care he will receive is limited. (When practitioners choose colleagues for themselves and their families, they do so primarily because of technical competence.)

Let us keep in mind that while patient care is paramount, the patient is not the only one to be satisfied. The dentist has certain technical services to perform, which brings him a sense of fulfillment and gratification at the same time he is performing services that the patient may need or want. The dentist's ability to perform such services may be minimized, interrupted, or obstructed by patient behavior not related to the actual treatment situation. While understanding

Dr. Jaffe is a practicing orthodontist who has published previously on dentistry and the behavioral sciences, and the socio-economics of dental care.

<sup>\*</sup> Better communications for better health. Edited by Helen Neal. Columbia University Press. New York: 1962.

on the part of the practitioner can help minimize such factors as fear, illness, or pressure in family living, it cannot eliminate or solve the basis for such problems in relation to treatment. The degree to which the self image of both the doctor and his patient are involved will partially determine the brittleness or elasticity of the relationship.

Both patient and dentist represent certain social and cultural experiences. In addition, the doctor has knowledge of treatment required and an idea of his own abilities and performance.

When the patient attempts to control the environment for treatment or procedures, or to project end results of treatment not amenable to the doctor, the practitioner's performance is at once severely restricted. While patient cooperation is more essential in some situations than in others, and while patients still have certain expectations of the doctor which he may or may not be capable of fulfilling, patient-imposed requirements obviously diminish the ability of the dentist to provide the best end result. Both interpersonal relationship and professional service therefore suffer. There should be little doubt that this must ultimately affect possible standards of dental treatment and service as well as the gratification desired by the dentist.

Children may use the treatment situation as a wedge against the parent for attention or sympathy. The professional office may even become the setting for a parental battle-ground as in the case of divorced parents, in order to hurt one another. Each may accuse the other of not having the child's best interest at heart. The performance of such patients and their families may be quite erratic, demanding, and unreasonable.

The fact is that such patients are unable to see the true perspective of the problem and in most cases are unwilling to do anything about it. (Occasionally some will recognize their problem, but will not know what to do.) Then too there is the tendency for some parents to protect the child against the dentist. This markedly worsens the treatment situation. Unusual compliments for the professional may merely be another manifestation of such situations.

The more sympathetic the doctor the less his ability to perform his service in detached fashion, hence the greater modification of his original treatment goal. The untrained or unobservant practitioner can unwittingly become involved in the patient's problem. Once this has happened he functions as a direct participant. The dentist's involvement in the personal problems of his patients should at best be minimal, his understanding maximal. The problem of treating such patients is that they may seem completely cooperative at one moment, and unusually difficult under circumstances that seem to bear no relationship to the doctor, his office, or the treatment being done.

Attempts by the practitioner to maintain a continuity of treatment may be looked upon by such patients as challenges of a personal nature, the explosive or irritating behavior by the patient may result. All sorts of situations will be conjured up to try to have the dentist change both course and method of treatment. Once the practitioner acquiesces, he has lost a vital element of control. This then enables the patient to know that he can control the dentist, and coincidentally with greater success as time goes on. Understanding and consideration are basic to doctor-patient relationship, but should not be permitted to distort the goals and objectives of treatment originally sought by the doctor. Without knowledgeable control, treatment time with such patients is greatly lenghtened.

Patient pressures and problems can distort and interrupt the dentist's treatment objectives. The observing practitioner should be able to recognize the hostile or suspicious patient without special training. Under such circumstances the dentist must take more time to explain things to the patient, and not merely concentrate on mechanical aspects of treatment. He must also be willing to discuss problems in treatment with his patient and to offer a reasonable and sensible solution. In order to prevent patient dissatisfaction which can arise from the disappointment of unrealistic hopes the dentist must educate such patients to the real limitations of dentists as people, and dentistry as an art and science:\*

This is all summed up well in a letter to me from Dr. Bernard Kutner, Associate Professor in the Department of Preventive and Environmental Medicine, Einstein Medical School. He wrote:

"The quality of interpersonal relationships in dentistry will be influenced greatly by the perceived role of the dentist, by his patient, and of the patient by his dentist. If the dentist is perceived to play the role of a selfless, humane, well-intentioned, interested, accepting

<sup>\*</sup> Blum, Richard H. The management of the doctor-patient relationship. McGraw-Hill Book Co. New York: 1960.

and protecting figure, the patient tends to reciprocate with respect, compliance, and cooperativeness. However, if the dentist is regarded as self-centered, indifferent, disinterested, impersonal, rejecting or unstable, his patient may respond with rejection, disappointment, anxiety, hostility and aggressiveness. In the final analysis it is the perception of the dentist that matters, not his actual values, interests, and concerns."

#### THE U. S. PUBLIC HEALTH SERVICE

The Division of Dental Health is the new name of the organization formerly known as the Division of Dental Public Health and Resources. Luther L. Terry, recently resigned U. S. Surgeon General and now vice-president of the University of Pennsylvania, stated, "The new name aptly describes the broad scope of the functions of this Division, whose special mission is to lead nationwide programs to apply research for prevention and control of dental disease, to promote sound dental health practices, and to assure the professional manpower needed to protect and improve the Nation's oral health."

Activities of the Division of Dental Health encompass dental disease control, epidemiology, dental manpower and facilities, dental education, postgraduate training, dental materials and technology, and dental economics. The Division also is responsible for the dental school construction facets of the Health Professions Educational Assistance Act.

Resources of the Division have risen from \$2.1 million in 1961 to \$8 million in 1965.

Most dentists, even now, link G. V. Black only with cavity preparations. He accomplished so much more for dentistry. A dental historian now tells of Black's contribution to oral surgery—circumferential wiring of a fractured mandible. Truly, G. V. Black was a most remarkable man. His name, along with Gies and Miller, will live long in dental memories.

# G. V. Black—An Oral Surgeon

RALPH W. EDWARDS, D.D.S.

REENE VARDIMAN BLACK (1836-1915) was a remarkable man whose life was strikingly similar to that of the 18th century physician John Hunter. Both were talented, aggressive, and resourceful. Both possessed ingenuity and natural aptitudes. Both abhorred the drudgery of farm work, and displayed an aversion to formal education. They had extraordinary powers of observation, and learned by studying nature—trees, plants, streams, animals, sky, clouds, weather. Each made unusual contributions to his profession. Like Hunter, Black was a genius.

Contemporaries of Black reveal that he had the mind of a Darwin, yet his formal education totaled 20 months obtained in a three year period of his youth. Later, after studying medicine for a year with his oldest brother, he was attracted to dentistry because of the opportunity to employ his skills in manual dexterity. Not many dental schools were in existence at that time (the nearest was at Cincinnati), so Black served a preceptorship with a dental practitioner.

Then in 1857, at the age of 21, he began the practice of dentistry, and developed a career that brought him international fame as a

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practitioner, researcher, teacher, and administrator. Through necessity he was compelled to find solutions to problems that constantly arose in his practice, and his investigations involved every branch of dentistry, including surgery.

A perusal of his bibliography shows that he wrote very sparingly

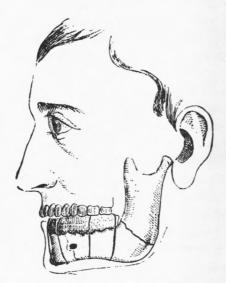


Figure 1. One of the forty illustrations made by G. V. Black for Gilmer's paper. Herein is shown Black's technique for the reduction and fixation of a compound fracture of the mandible. A reinforced gutta percha or vulcanite splint was used to cover the teeth. Later, this principle was applied to the fracture of an edentulous mandible, using the denture as a splint.

on the subject of oral surgery, yet his contributions in that field are of unusual merit. His skill in surgery was such that David Prince, an eminent Chicago surgeon, depended upon Black to care for his jaw fracture patients. Refinements in cleft palate surgery and facial plastics were suggested to Prince by Black, yet he never claimed credit for them.

Perhaps the greatest contribution of G. V. Black to oral surgery was circumferential wiring for the reduction and fixation of a fractured mandible. The principle of circumferential wiring of a fractured mandible was first introduced by Jean Baptiste Baudens, who, in 1840, employed a ligature of six to eight linen threads to stabilize an oblique fracture of the body of the mandible. This was accomplished by introducing the ligature with a needle from below on the medial and lateral surfaces of the mandible into

the mouth at the site of the fracture, encircling the line of fracture. The ligature was tightened to hold the fragments securely, and fastened above a molar tooth.

It is unlikely that Black was aware of this publication, for 40 years later he developed a method of reduction and fixation of a fractured mandible by wire encirclement using a splint for alignment and stabilization.

Thomas L. Gilmer, of Quincy, Illinois, was a protege of Black, and

was one of many who had been helped by this illustrious man. Early in 1881, Black suggested that Gilmer present a paper on oral surgery at the forthcoming meeting of the Illinois State Dental Society. Realizing his limitations, Gilmer was reluctant to do this since he felt that such a presentation would be ineffective without suitable illustrations to accompany it. With characteristic generosity, Black offered to make the illustrations, and within a few weeks had finished 40 drawings for the paper. Among the drawings was one showing a method of stabilizing a fractured mandible by the use of a splint and silver or platinum wires (Figure 1).

On May 11, 1881, Gilmer presented his paper on "Fractures of the Inferior Maxilla" at the 17th annual meeting of the Illinois State Dental Society. In this lengthy paper he discussed the problems and methods of treatment of mandibular fractures, and introduced Black's method of "wiring around the bone." This method was for multiple compound fractures of the *dentate* mandible, and consisted of a reinforced gutta percha or vulcanite splint adapted to the occlusal surfaces of the lower teeth and held firmly by the encircling wires. Gilmer gave full credit to Black when he stated: "The method of wiring around the bone was first suggested and successfully used by Dr. G. V. Black, Jacksonville, Illinois."

Eventually this method developed by Black was applied to fractures of the *edentulous* mandible, using the patient's denture as a splint for reduction and fixation of the fracture.

Gilmer lamented the fact that "in the treatment of fractures of the lower jaw by splinting, when the mouth is toothless, I must confess I am not equal to the occasion, unless the patients have artificial teeth." Gilmer then would utilize the upper and lower dentures, obtaining casts and occlusal relationship from them, and construct a splint similar to a Gunning splint, depending on a skull cap and chin support to stabilize the splint. It is ironic that Gilmer did not recognize the possibility of using a lower denture as a splint in a fracture of an edentulous mandible, and utilize Black's technique of circumferential wiring.

References will be found on page 376.

When you mention names in dentistry—Black, Gies, Brandhorst, Johnson, Gurley, and a multitude of others: Friesell, Smith, Midgley, Logan—Alfred Owre must be included. A man who knew Owre well and closely gives an intimate portrait of an outstanding—long before his time—dental educator.

# Alfred Owre—Dental Educator

JOHN OPPIE McCALL, B.A., D.D.S.

ALFRED OWRE, in his day, was one of dentistry's outstanding educators. He was a man of exceptional ability, with a devotion to an ideal. But he was ordained to fail in the realization of his goals. He came on the dental scene as a dental and medical graduate when dentistry was a fledgling profession. He became an instructor in the School of Dentistry of the University of Minnesota in the 1900's, and Dean of the school in 1905. There he compiled an exceptional record, raising the school to top rank among the dental schools of the country. By virture of his training he early became convinced of the need for effective medical training in the dentist. He carried that worthy conviction with him throughout his career.

It was also at Minnesota that he developed ideas about the method

Dr. McCall has had a long and fruitful career in the field of periodontics, and has been a frequent contributor to the literature.

The biographical material in this article was derived from "Alfred Owre, Dentistry's Militant Educator," by Netta White Wilson. Minneapolis: The University of Minnesota Press, 1937.

for provision of dental service which seemed less than admirable to his confreres of that day. And, unfortunately, he carried both convictions with him when he was called to the deanship of the College of Dental and Oral Surgery of Columbia University in 1927.

Often it is said of missions that have failed of their purpose that the effort was made too little and too late. It was an unhappy fact that in making his bid to advance the level of dental education in this country, Owre tried to accomplish too much too soon. A man of brilliant intellect, high ideals, top level administrative ability, and total dedication to the cause he believed right, he nevertheless "came a cropper" through tactical intransigence.

Because of this, his later years at Columbia were clouded by controversy. I once wrote (1) that Owre reached the heights in the field of dental education only to plunge into a whirlpool of his own making that was finally to engulf him and degrade his former splendid record.

Basically, Owre wanted people to get the best that dentistry could give in terms of scientific knowledge and in service. The question was: how best to give it to them. He advocated giving additional medical training to dentists beyond that traditionally provided in the dental curriculum. He had considerable medical training himself, and he could recognize the systemic results of oral disease and the systemic implications of oral disturbances. He knew the part that the dentist must play in managing these conditions.

Owre was on sound ground as to the fundamental importance of medical training in the dental curriculum. In enunciating this principle, he was given approval by other dental school deans. But unfortunately he developed a distorted view as to how far that training should be carried. He thought that the dentist should have nearly complete medical training, and become in effect a physician. Dental training would therefore be curtailed to a degree, but this would be offset by the fact that the dentist would then delegate most technical procedures to specially trained technicians who would work under his supervision (2).

Dentists could not, at that time at least, accept this procedure as professionally sound. And it was at this point that Owre fell afoul of the great mass of dentists in the country. He proposed that each medically trained dentist direct the services of several technicians. Through that plan he believed that dental care of the best quality

could be provided for a much larger number of people than under the prevailing private office method, and at fees that virtually all could afford.

To implement this idea and to set a pattern for carrying it further, Owre (by this time dean at Columbia) set up a service clinic in the school. On the face of it, this clinic was similar in set-up to teaching clinics established in all dental schools, in which dental students performed various operations on patients seeking service. But there was a difference at Columbia. For one thing, some of the more intricate operations were performed by graduate dentists who were salaried members of the faculty; the students were limited to the simpler tasks and thus failed to benefit from practicing the more difficult operations under the supervision of their instructors. But this was not the only feature of the clinic which brought it under fire—fees were charged for the operations and appliances provided, and these were not the nominal fees usually charged in dental college clinics but were estimated on the ability of patients to pay.

Dentists in private practice, charging lower fees to patients unable to pay at the usual rate, objected that the Columbia clinic was, by such practice, undermining private practice in the community. They were particularly incensed by the fact that in the Columbia clinic much of the treatment was given by graduate dentists.

Owre's proposals were revolutionary enough to arouse opposition in a profession brought up on the private practice concept, with each office a self-contained unit and auxiliary assistance used but little. Such proposals, even if considered professionally sound and in the public interest, and even if considered acceptable in principle by leaders of the profession, could only gain support from the profession at large after mature reflection based on considerable educational effort.

But Owre chafed at delay and, although often warned by his friends that he was moving too fast, refused to await the slow moving processes of persuasion based on reason. By his insistence, he put himself into a position of direct opposition with those leaders who wanted to help him; even with the man who had helped him most, William J. Gies. In the course of the interchanges between Owre and Gies, it became clear that while they were in agreement as to the fundamentals to be sought, they differed sharply as to the means for accomplishing those objectives.

All of this controvery finally led to a request to Owre from the Trustees of Columbia University that he relinquish his post as dean of the dental school, a position to which he had come with such high hopes and professional satisfaction less than ten years before.

How is one to explain these untoward developments in a man of Owre's fundamental abilities? To quote again from my earlier paper: "Alfred Owre was an aristocrat with all that that implies in the political as well as the cultural sense of the word. Having a brilliant mind, he was intolerant of those less favorably endowed and contemptuous as well. For the same reason he was surer of the rightness of all his ideas than any human being can, in the nature of things, expect to be. And, finally, he was completely lacking in political acumen."

Owre tried to accomplish too much too soon. By "too much" I mean that his plan for medical training of dentists would almost inevitably take them out of the intimate touch with the many facets of dental practice that must continue to be an integral part of dental science and art. Dentists must have a greater knowledge of medical science than they get today. The question is how much, and how is it to be imparted. To accomplish this I have advocated (3) a modification of Owre's proposals which, while quite comprehensive, seems still to be within practical bounds. I have suggested what in effect would be a five year course, the fifth year being a compulsory internship.

The problem of "too much" applies also to Owre's proposal to place all of the technical phases of dental art in the hands of technicians working under the direction of a so-called "master-dentist." In modifying Owre's plan, I advocated in 1944 (3-4) training two special types of auxiliaries. One, a group to treat children's teeth as had been done in New Zealand; the other to provide denture service for the aged. With these special groups operating under the control of dentists, private dental practice would not be affected appreciably. In making those proposals (ten years after Owre's resignation at Columbia) I made a point of not urging their immediate adoption. In other words, of not trying to move too fast. It is interesting to note that the *Survey of Dentistry*, in 1961, made the same recommendations. But here, too, there was no suggestion as to early implementation of the suggestions.

Thus, there is a situation in which a given set of proposals met

with rejection by both practitioners and educators, and at a later date virtually the same set of proposals are put forth by a distinguished panel of educators, public health experts, and representative members of the dental and health professions.

One is struck by the apparent anomaly. One has to look beyond the cliché of "too much too soon" for an explanation. What has happened is that two changes have taken place in recent years to account for this revision of opinion. One is an increasing recognition of the part that dental health plays in maintaining general health, with the responsibility that this puts on the dental profession. The other is an emerging recognition of the social responsibilities of the dental profession—the responsibility of providing dental service to the population as a whole, not simply to those who can afford to pay for it.

Another factor coming to the fore is that the population is growing, and an effective dental manpower force must be provided to care for the additional members of the community. Further, demand for dental service must be expected to grow in some degree with more effective health education activities.

This is not to say that the dental profession is ready to accept these proposals in 1966. But the climate seems to be more favorable for their consideration than in the past. Also, the profession is realizing that proper safeguards for both profession and public can and will be set up.

It appears that Alfred Owre was justified in making, at least in part, the demands he put forth so many years ago.

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# Thomas W. Parsons—Dentist: A Dantean Devotee

H. MARTIN DERANIAN, D.D.S.

This year, 1965, is the seven hundredth anniversary of the birth of the great Italian poet, Dante Alighieri. The event has been celebrated in literary and theatrical circles throughout the world. But of special significance to dentistry is that a Boston dentist and poet, Thomas W. Parsons, Jr., dedicated his lifetime to Dante and to translations of his works.

Poetry of a high order and dentistry may at first sight seem incongruous. Yet they blended uniquely in the life of Parsons. He was born in Boston in 1819. His father, a native of Bristol, England, received an M.D. degree from Harvard Medical School in 1818, and subsequently practiced dentistry in Boston and as an itinerant dentist, as was the custom of the time. Thomas W. Parsons, Jr., studied at the Boston Latin School between his ninth and fifteenth years and became a devoted student of the classics. Instead of a college education, he toured Europe with his father in 1836.

To the sensitive, imaginative boy, this trip determined the artistic aspect of his life. He had a remarkable gift for language and quickly learned the soft Italian tongue. While in Florence, as he strolled the cobble-stoned streets of Dante's birthplace, he fell completely under the influence of the immortal poet. ("The Divine Comedy" is a visionary journey through the horrors of Hell, through Purgatory, and finally into Paradise. He memorized the entire Paradise section.)

This early enthusiasm for Dante developed into an intense and life-long passion with Parsons for the remaining 55 years of his life. To him, Dante was one of the greatest poets of all times. He would have agreed with T. S. Eliot that, "Dante and Shakespeare divide the world between them; there is no third."

Permission to publish it has been graciously granted.

This paper has been prepared from a presentation read before the American Academy of the History of Dentistry in 1963.

Already the forces that shaped Parsons' life had become evident: the dental background of his father, and his own innate sensitivity to the classics and to Dante. Immediately after his return from Europe, he entered Harvard Medical School. While a student there, at the age of 22, he wrote one of his first and greatest poems—"On a Bust of Dante."

An English critic later called it, "By far the finest stanza that ever left America." Stedman said it was, "The Peer of any modern lyric in our time."

Parsons attended the medical school for only a year and a half; he left without receiving a degree. Instead, he studied dentistry under the preceptorship of his father. He practiced on Winter Street, the fashionable part of Boston. He had among his patients the literary giants of his day in Boston. Though little is preserved concerning his professional career, several references to dentistry appear in his letters. These have been collected at Harvard University and the Boston Public Library.

One of his letters concerns an appointment he had—but unavoidably missed—with James Russell Lowell, the poet, essayist, and diplomat. Parsons wrote him: "I console myself in some degree by the thought that there is no imminent danger in the present condition of the faulty molar and that it might remain for weeks without change." He then asked Lowell to make another appointment, promising to be "as faithful as the Fates permit." Certainly flowery language for a dentist writing to his patient!

He must have been a successful dentist. When he died, he left an estate of \$90,000.00. And he did this while not practicing for the last 20 years of his life. He traveled extensively abroad. His books were published at his own expense.

The blending of dentistry and poetry in Parsons was described wittily by Charles Eliot Norton, author and Harvard scholar:

You ask who Parsons is. He is a dentist by profession (whence he learned the use of the file, and of compression and various other secrets of poetry) he is most retiring and modest in life and well known only to a few. I like him very much and have known him for a long while.

For a dentist in Parsons' era to have literary tastes, and to be a writer or a poet was not altogether unusual. The mid- and late-19th century was the age of the whole man, whose knowledge of the

world was far wider than that of his profession alone. This is exemplified by an address which the President of the Massachusetts Dental Society, Robert Andrews, delivered in 1876 advising his colleagues:

We should be so cultured that people could not tell our work by our conversation; for a narrow education gives one knowledge of nothing but one's own work.

An interesting anecdote involving Parsons and his office was described by Edwin Booth, the famous actor:

"I was in a drug store in Boston one day, when an active nervous man came in and said to the druggist in a loud whisper, 'Is that Edwin Booth?' 'Yes,' answered the druggist, 'Do you know him?' 'I do.' 'Please introduce me.' And after being a compulsory listener to this preliminary, I was presented to Dr. Parsons. He showered me with compliments which amused me by their exaggerated sense of my importance. Then he invited me to his office and I accompanied him there. No sooner was I seated in his big dental chair than he rushed to his desk and drew out a manuscript poem, which he thrust into my hand with a modest request that I should read it aloud. It was written in a blind hand, and I could hardly decipher the words. I begged him to excuse me, and assured him that I was a very poor reader—that I never trusted myself to read anything unless I had studied it carefully. He seemed disappointed but his face brightened up presently and he said, 'Will you listen to me read it?' 'Yes, of course,' and he proceeded to recite with much fire and energy his splendid poem, 'Dirge for One Who Fell in Battle.' I praised the poem as it deserved, and an acquaintance, begun in this singular manner, strengthened into a warm and enduring friendship."

In 1843, Parsons published "The First Ten Cantos of The Inferno of Dante Alighieri, Newly Translated into English Verse." At the age of 24, he became the first American to translate any of "The Divine Comedy." Characteristically, he published this volume anonymously. It was not until 24 years later that his version of "The Inferno" was completed and published. To a publisher who attempted to hasten him, he replied, "I expect to be a student of Dante through all eternity and therefore I cannot afford to be hurried by the exigencies of your house."

In one of his sonnets, he says,

Friends must be patient when I do these things Wasting an hour that might be better given To work—in following Dante far as heaven.

Little wonder then that it has been suggested that, with his long, lean figure and his deep eyes and prominent nose, he bore a certain resemblance to his idol. There are few things in literature more remarkable than this loyalty of Parsons—this absolute consecration of one soul and mind to the interpretation of another.

Parsons became a close friend of Henry Wadsworth Longfellow. Longfellow, in "Tales of a Wayside Inn," gathers the stories of a group of men seated in front of the fireplace of an Inn relating, each in turn, some of the most interesting stories in the literature of the world. Longfellow chose real persons as patterns for the characters in his story; for the poet he selected Parsons. The Wayside Inn still stands in Sudbury, 20 miles west of Boston. In the parlor of the Inn hangs a portrait of Parsons.

Oliver Wendell Holmes, the physician-writer, said of him:

Dr. Parsons is as true a poet as we have among us . . . to his life-long devotion to Dante, by the absorbing study he has given him, I attribute the facility of his style, the exquisite art that characterizes his work. He has written some poems finer than any other American poet has written.

### Holmes also wrote to Parsons:

Your Dante, I judge from all that I have heard and read will carry your name to posterity coupled with a noble and monumental achievement.

But the poet-dentist never really achieved the full recognition he richly deserved; one reason being that he did not command the attention of a large public. He was a "poet for poets" rather than for the people. He was a literary craftsman who took such pride in his work that he labored over it slowly, rewriting and polishing, sometimes changing poems even after they had been published. Though he wrote his poems with infinite care, he was surprisingly indifferent to their subsequent fate. More often than not, he sent his poems to newspapers and to obscure periodicals.

However, his poem "The Sculptor's Funeral" appeared in the first volume of *The Atlantic Monthly* in 1858, and was followed by 25 poems over the years.

His collections of poems appeared as follows: "Poems"—1854; "The Magnolia"—1866; "The Old House at Sudbury"—1870; "The Shadow of the Obelisk"—1872; and "The Willey House and Sonnets"—1875. "On a Bust of Dante" is included in Alfred Kreymborg's Lyric America. He is represented in the "Oxford Book of American Verse."

In addition, he published a book of Common Prayer called "Circum Praecordia, The Collects of the Holy Catholic Church as They Are Set Forth by the Church of England" (1892). This book attests to his profound religious feeling. He was a member of the High Episcopal Church—"as nearly a Roman Catholic as he well could be without absolutely stepping over the dividing line." Posthumously appearing in 1893 were a book of "Poems," and a "Translation of Dante's Divine Comedy into English Verse."

Thomas Parsons was a shy, reserved man who, as has been said, "Carried his solitude with him into the Street." He has been characterized as a "Hamlet of verse," as being out of joint with the time in which he lived, as though he should have lived in Dante's age.

His books were privately printed, mostly through the efforts of his wife who shared his literary interests. He had married Anna Allen in 1857, and she was his constant companion until she died in 1881. The marriage was childless.

Parsons traveled widely in England and Europe. There is evidence that he practiced dentistry in London during a 14 month stay there in 1871-1872.

Although he never received a dental degree, Harvard conferred an honorary M.A. degree on him in 1853, in recognition of his poetic accomplishments and his role as a New England poet laureate. He was also elected a Fellow of the American Academy of Arts and Sciences.

The last 20 years of his life were devoted entirely to writing. He spent much of his time at the Wayside Inn and at his home on Beacon Hill in Boston. He died September 3, 1892, at the age of 73, in the home of his sister in Scituate, Massachusetts.

Many tributes were paid to Parsons by men of letters of his day. No other tribute equaled that of fellow poet Thomas Bailey Aldrich, who wrote:

Dr. Parsons' lighter lyrics have a grace and distinction which make it difficult to explain why they failed to win wide liking. That his more serious

work failed to do so is explicable. Such austere poetry is not the taste of the mass of readers; but such poetry, once created, becomes a part of the material world; it instantly takes to itself the permanency to have existed.

Fifty years after his death, Reverend John van Schaick, Jr. writing in *The Christian Leader* said:

They tenderly buried the body of the old man with honors. In Mount Auburn Cemetery in Cambridge, Mass. They praised his writings in the newspapers and they all went about their business. Soon T. W. Parsons was pretty much forgotten. Curiously, however, all through the half-century since he died his name has kept coming up, and almost always it has been on the lips or pen of the most cultured and discriminating people. He was was no mediocrity. He was a "poet of poets" and the poets have given him his honored place in literature.

It is time that the dental profession granted recognition and honor to this unusual and talented colleague.

### A FOOTNOTE

The three papers you have just read about Black, Owre, and Parsons are vignettes of dental history.

Carlyle said it well: "The history of the world is but the biography of great men," and further, "History is the essence of innumerable biographies."

These "records that defy the tooth of time" call to mind the words of Theodore Roosevelt, "The old days were great because the men who lived in them had mighty qualities."

## Attitude and the Professional Man

ROY T. DUROCHER, D.D.S.

Reports from state board dental examiners, committees on dental ethics, and dental educators reveal a continual concern over the behavior of a segment of our profession. A scrutiny of this behavior uncovers attitudes unbecoming a professional man. In a study (1) of the personality characteristics of dental students on behalf of the Commission on the Survey of Dentistry, the utilization of the Allport-Vernon-Lindzey "Study of Values" (economic, esthetic, social, political, religious) indicated that "On the social scale, which reportedly measures a concern for an interest in one's fellowman, the students in dentistry seem to have relegated any such value, as compared to the others, to a netherly position."

The Preamble to the Constitution of the American College of Dentists states as a basic objective the promotion of the highest ideals of the profession. Fellows are committed to leadership in that characteristic which is the "ground substance" of human behavior—attitude. Eligibility for admission to the College categorically implies that one possesses professional attitude, but *leadership* entails the guidance of others in the profession, and those who may be potential recruits for dentistry. Leadership in any endeavor requires a deeper knowledge and understanding of principles underlying the activity. It would seem appropriate, therefore, to reflect in some depth upon professional attitude and the behavior for which it serves as a substrate.

The word "attitude" is derived from the Latin aptitudo which has as its root the word aptus, meaning suited or adjusted. Webster defines attitude as being the "position or bearing indicating action, feeling, or mood." Webster defines mood as meaning a "state of mind." When we refer to professional attitude, then, we are considering the position to which one adjusts himself in regard to one's state of mind. But a state of mind about what? It is a state of mind about a sense of values. And further, a sense of values about what? This question leads to the meaning of the word "professional." It is rather difficult

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to state clearly what one means by a professional man. Rather than offer some trite phraseology in an attempt to define the word "professional," it may be preferable to indicate the relationship between the connotation of this word and attitude. In other words, in answering the question "a sense of values about what?" or "attitude about what?" one might look at those values to which the attention of the professional person should characteristically be directed.

The distinguishing feature of the professional man in regard to attitude is his sense of values about his a) fellowman, b) his profession, and c) the contribution of his profession to man. That is to say, society looks at his concern, not about himself and his own belongings, but about others and other things. In terms of a sense of values, the professional man should be an "extrovert." In regard to his lifework, he should view a situation in the light of how his background, education, specific skills and knowledge can contribute to his fellowman and his profession.

One reason for emphasizing attitude in the professional man was alluded to earlier by reference to a study of personality characteristics of dental students. Since attitude is a hallmark of the professional man, it may be well to point out other findings. Another tool utilized in the Heist study was the "personal preference schedule" which psychologists believe indicates certain needs of individuals which can be measured. The results indicate that "In the area of human relations in social endeavors, he [the dental student] has proved to have little need to assume responsibility or attempt to guide or direct the efforts of others." . . . "Also, the behavior . . . is not peculiar to dental students but much like that of the majority in our society. However, to find such attitudes in a professional group, assuming the attitudes persist to graduation, is perhaps a bit surprising" (2).

Experience of another sort is also of interest. In the Summers of 1959-60, institutes for dental teachers were conducted at a Midwestern university. Sixteen and twelve schools respectively were represented. Both groups identified four cardinal characteristics of the professional man: skill, knowledge, judgment (in terms of skill and knowledge), and attitude. These same groups, composed of different individuals, came to the conclusion that dental graduates as a whole had achieved skill, knowledge, and judgment but that their attitude left much to be desired. Upon close examination, it was evident that this attitude referred to the students' sense of values in

regard to their fellowman and their profession. To what degree these attitudes actually persist following graduation may be unknown, but there has been sufficient evidence exhibited by the behavior of many to warrant the concern of leaders in and out of the profession.

Professional attitude must be developed from an understanding not only of the objectives of one's profession, but also of the people on behalf of whom these goals have been set. The patient must be looked upon as a *person*—that is, a human being who possesses individuality which distinguishes him from any and every other human being and which characterizes him by a unique physical appearance, by a unique intellect and will, by a set of complex emotions—all of which blend into a oneness which has hopes and aspirations of occupational, moral, religious, political, cultural, and social overtones. Although attitude philosophically is an entity in itself, for the patient and the profession it has no substance unless it is reflected in the behavior of the practitioner. The professional man who has developed a desire (attitude) for proper behavior will seek out guidelines which will show him the right way to becoming a better professional person.

These guidelines are designated as "codes of ethics." But a person needs to understand the principles underlying a code of ethics. A great deal has been said and written about ethics. Dental schools present courses on the subject; the American Dental Association, state and local societies, and state boards publish their codes of behavior, but yet the pleas of the profession go unheeded by too many. In most instances, these pleas are placed essentially at the social level. It may be that a set of regulations emphasizing mainly social conformity for a specific society (in this case the dental profession) from an idealistic point of view is not sufficiently lofty, and from a practical point of view is not sufficiently binding. It may be that ethics considered from its original philosophical orientation as conduct based on certain fundamental principles such as Justice and the Natural Moral Law would be more compelling. Socrates and Aristotle deduced that the standard of human conduct is fundamentally human nature itself; in other words, that the origin of the sense of duty to do good can be traced to man's reason.

Aristotle had this to say: ".... man, when perfected, is the best of animals, but when separated from law and justice, he is the worst of all" (Politics). The phrase "law and order" is a common one, and

its implication is significant. Law is an expression of reason which puts order into human conduct, for reason spontaneously recognizes that order is necessary if social life is to exist. There is a variety of laws and the spectrum ranges from the Natural Moral Law to the "regulation" or rule which is sometimes not truly a law and might be referred to as "quasi-law." On the basis of harmony alone, it is logical to expect that there are standards by which to decide whether something is good or bad, right or wrong, which are true for all men everywhere. These standards, taken together, are referred to as the Natural Moral Law.

Basically what has been said is this. Man's intelligence tells him that human beings are meant to do good, and through the Natural Moral Law, his intelligence guides him in human conduct. Law is based on authority. Ethics, or morality, without accepted authority is not very compelling. This is why the more common view of morality is conformity of an action with an external law (in contradistinction to the Natural Moral Law). However, the law imposed by authority, or what is referred to as the sanction, is basically accepted by man not as a restriction to freedom but as a means of arriving at something good. In other words, we obey a law (of legitimate authority), basically (reasonably, that is) not out of fear, but because we see the law as good. Nevertheless, very often it is the sanction that makes us follow the law in specific instances. (A red traffic light is intended to preserve life. Basically we observe its command to stop for the good of our lives and that of our fellowman, although at any given moment it may be the potential fine behind the red light which prompts us to stop.)

The idea that moral life is a constant battle between authority and law on one side and our wishes on the other is certainly common, but good moral conduct is not based on fear or force. Rather it evolves from understanding that the fundamental purpose of law and authority is to guide us in making a moral judgment when our personal insight is inadequate—for instance, when we are not fully informed on all the details pertaining to a specific problem. The reason, of course, why our personal insight, our reason, is at times imperfect is that man is not only rational but also animal—a creature of passions. A good person accepts law as showing the right way to becoming a better human being or to preserving and promoting the common good. The guidance of law takes on the aspect of force only

when one ceases to act as man should act. Another way of stating a postulate is that theoretically man can be ethical by reason alone, but practically it does not work out that way and laws are needed.

Such is the case with a profession's code of conduct which includes not only the fundamental values of behavior which have been discussed, but also those which are simply of a regulatory nature, "quasi-laws" which are promulgated by the members of the profession for the good of the profession as a whole and for its members as individuals. These, too, should be accepted as a guide to preserving the common good, and not as a restraint of no reasonable objective. They take on the aspect of restraint only when the professional person is no longer disposed to act as a professional person should act, just as the guidance of law takes on the aspect of force only when a person ceases to act as man should act. As one reviews the principles of ethics of the ADA, it may be difficult to understand applications in some instances. It should be remembered that no one as an individual has the personal insight sufficiently adequate to perceive all the intricacies of the problems which practicing dentists face.

Because of man's imperfections, dependence upon individual judgment, with all its personal prejudices and selfishness, could never preserve the common good. To be sure, even group judgment can have its failings. But if one is mature and recognizes that those who have gone before have wrestled with the problems of professional conduct with good faith, with wisdom, and experience, one will accept these regulations basically as reasonable, because they show the way to one's goal—the welfare of the patient and of the profession. Many of these regulations at *first* glance seem to be only for the protection of the profession. but in fact, they are intended to protect the interests of the public.

The very basic principle of human behavior to which most all problems arising in the management of a dental practice are related is Justice. Justice has been defined by Adler as the habit of not obtaining willingly an excess of goods for one's self at the expense of a diminishment of goods for others (3). Our reason tells us that Justice is necessary for the social life of man (e.g. the courts). We have seen that ethics seeks to put order into our lives and actions; it is specifically the ethical principle of Justice that is necessary to establish order in our relations with others. It is through Justice that man renders to each his due. This "due" is what we call "right."

Justice and rights go together. In other words, if a man had no rights, there would be no order to society and no order to human nature. This is why the drafters of our Declaration of Independence stated that "Men are endowed by their Creator with certain inalienable rights. . . ." In other words, there are certain rights which are natural (or basic) rights. Generally, these are, as has been stated many times in the past, "to give each his due," "to cause no harm to others," "to treat others as we would be treated" (The Golden Rule). The law protects the rights of others; Justice guides us in respecting these rights. However, Justice (when considered as a principle of ethics) is not to be equated with civil law. One might act unjustly, and yet not violate a civil law. Justice is more encompassing, and makes up for inadequacies in the law. On the other hand, some civil laws or administrative regulations on the surface do not seem to involve Justice when actually they do. Professional duties are Justice in operation.

A member of a profession has specialized knowledge and skills acquired for rendering intimate service for the well being of the public. With this talent, one assumes a special duty. The public one serves has the right to expect professional competence and integrity of character. On the other hand, it is true that the professional person has the right to expect a life, and the means wherewithal to obtain it, which society accepts as being consistent with his education and station in life. A basic tenet of Justice consists in giving every member of a group a share of things that is coming to him according to his place in the group.

The moral implications, then, in the daily routine of caring for dental patients usually revolve about the duties and rights of the dentist and the patient (or another dentist) to each other. Practically, the problem is a matter of balancing rights and duties. For example, often the predominating factors which influence young people to choose a profession as a career are independence and money. These factors in themselves are not morally wrong but if not controlled, the basic attitude of which they may be a reflection can readily lead to infractions of ethics. When this occurs, it is usually a matter of injustice. A young man wishes to be independent; he wants to "be his own boss." Unless the individual has been imbued with the value of self-discipline; unless he realizes the difference between license and freedom, between independence and Justice; unless he realizes

that he is free of "control" by others only to the extent that neither his nor their rights are violated and to the extent that both his and their duties are fulfilled, the insistence on independence will lead to injustice, for by nature we are inclined to look after our own welfare. In the absence of other motivating factors, Justice prompts the professional man to look after the welfare of others.

Having developed the proper professional attitude and recognizing the fundamental tenets which govern human behavior, which recognition will also fortify attitude, there is more likelihood that the professional man will think of the patient first when he performs a professional service; that he will not for material gains do anything which is contrary to his professional conviction; that he will respect the right of his colleague to his good name; and that he will support the activities of his professional organizations. Just as the good person accepts law as showing the right way to becoming a better human being, the good professional man will accept the code of ethics of his profession as showing the right way to becoming a better professional man. Admittedly, there will be times in specific situations when it will be difficult for him to identify the right course of action, but with his good will and intelligence and wise counseling from leaders of the profession, he will usually arrive at the proper conclusion. There will be times when honest mistakes will be made. Hopefully, they will be few.

As dental knowledge expands, as the standard of living continues to rise, as the populace becomes better educated and more sophisticated, this changing society will undoubtedly expect a different role of the dentist. And for years to come this role may be in a very fluid state, so that many criteria for judging the practitioner will be modified. Since attitude is at the heart of human behavior, it will remain as an important criterion for evaluating the worth of a professional man, and it will continue to be a significant factor in stabilizing the patient-doctor relationship.

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The Committee on Specialties and General Practice is a new Committee of the American College of Dentists. In its first report, 1964, the Committee has chosen to ignore the all-encompassing area of both specialties and general practice bestowed on them by the Board of Regents, and will confine the report to the specialities only. Members of the Committee were: Willard C. Fleming, Chairman, Philip E. Blackerby, Jr., Robert L. Heinze, Walter Dundon, and Elmer Ebert.

# Specialties and General Practice A Committee Report

A SURVEY of the literature on the subject of specialties reveals a plethora of subjective opinions and a dearth of objective information. There are some dentists and dental organizations which firmly believe that dentistry should have no specialty groups. Others feel that orthodontics and oral surgery are the only true specialties of dentistry. The American Dental Association officially recognizes eight specialties. Other dentists and groups feel that the number of specialty groups should be greatly expanded. Some states have specialty laws that recognize certain specialty areas by law. The number of specialty groups required in the dental profession while a matter of concern to the Committee is not included in this report. It is simply mentioned to point out that there is a great diversity of opinion on the subject of specialties. For the purpose of this report, the Committee confined its study to the eight areas recognized by the American Dental Association.

It was the opinion of this Committee that we should limit our study this year to two objectives. The first was to determine the capability of institutions to develop specialists in 1964-65-66, and at the same time meet the requirements of the American Dental As-

sociation of two years postgraduate education. The second objective was to determine the need and/or the demand for specialists in the eight areas recognized by the American Dental Association.

### Capability of Institutions to Develop Specialists 1964-65-66

The method employed to obtain information regarding the first objective was a postcard questionnaire sent to dental educational institutions in this country. Hospitals, Veterans' Administrations, schools of public health, and sources of preceptorships were not contacted. Contacted were forty-eight dental schools, the Eastman Dental Dispensary, the Walter G. Zoller Memorial Dental Clinic, and the Forsyth Dental Center. There were forty-eight replies. This unusually high response was undoubtedly due to the simplicity of the questionnaire and the fact that it took little research on the part of the respondent to answer. A copy of the questionnaire and the accompanying letter are appended. The replies are tabulated as follows.

TABLE I
WILL COMPLETE SPECIALTY TRAINING (2 POSTGRADUATE YEARS)

	1964	1965	1966
Orthodontics	257	240	267
Oral Surgery*	96 (154)	99 (160)	105 (166)
Periodontics	98	91	104
Pedodontics	55	57	69
Prosthodontics		58	69
Endodontics	15	20	21
Public Health	2	4	3
Oral Pathology	18	21	22
Total per annum	602	590	660

<sup>\*</sup> The smaller number of anticipated graduates completing two years of postgraduate training in oral surgery represents the replies from the schools. The larger number represents the "maximum number which could be expected to complete hospital programs of two years or more in length" (Council on Dental Education). It is quite obvious that some of the 96 in 1964 could be included in the 154 completing hospital programs in that year. The accurate number of oral surgery graduates lies between the smaller and larger figures for each year. The Committee hopes to clarify this figure in subsequent reports.

There was a wide variation in the number of courses offered by schools. These range from one school offering 108 two year post-graduate courses to eight schools offering one or no courses.

### NEED OR DEMAND FOR SPECIALISTS

The source of information for this part of the report was drawn from the American Dental Association report, "Facts About States 1963," a publication developed by the Bureau of Economic Research and Statistics. Listed as specialists were dentists who were diplomates of specialty boards, members of recognized national specialty societies, or licensed as specialists in states in which they practiced. Associate members of the American Association of Orthodontists were listed as orthodontists.

TABLE II

DISTRIBUTION OF DENTAL SPECIALISTS IN 1962,
BY REGION, STATE, AND POPULATION

Region	Population	Number of Specialists	Population- Specialist Ratio
New England	10,757,700	315	34,000:1
Middle East	41,251,700	1,213	34,000:1
South East	37,838,300	666	57,000:1
South West		365	40,000:1
Central		1,248	38,000:1
North West		217	43,000:1
Far West		849	27,000:1
*Federal Services		248	30:1
Total Number of Speci	alists	5,121	

<sup>\*</sup> For this report, we are omitting further reference to the number of specialists listed in the Federal Services and are using as the national figure those who are not in the Federal Services. This gives a total of 4,873 who are in private practice, teaching, research, and administration.

As one studies the table, one can come to certain "by and large" conclusions.

- 1. The South East has the largest ratio of population per specialist —57,000:1.
- 2. The Far West has the lowest ratio of population per specialist —27,000:1.
- 3. The United States averages about 38,000 population per specialist.

The Committee considered methods of estimating need and/or demand for specialists in the future. These are as follows.

1. Using 38,000:1 as the national average, how many additional

specialists would be needed to raise all the regions to this ratio? The answer to this would be a total of 5,250 specialists as compared to the present 4,873.

- 2. Using 27,000:1 as the lowest ratio, how many specialists would be needed to raise all the regions to this ratio? The answer to this would be a total of 6,859 specialists as compared to the present 4,873.
- 3. Our population growth is roughly 3,000,000 per year so that by using the first figure of 1 specialist to 38,000, we would need to add 160 specialists for 1963-64, plus 80 in 1965, plus 80 in 1966.
- 4. Using the second figure of 1 specialist to 27,000 population, we would need to add 220 specialists for 1963-64, 110 specialists in 1965, and 110 specialists in 1966.
- 5. One would have to take into account that dentists die and retire at approximately 22 per 1,000 per year so there would be a replacement factor of 220 specialists by 1964, and 110 specialists in 1965, and 110 specialists in 1966 (using the 38,000:1 ratio only).

It would appear from these admittedly rough estimates that our anticipated output of specialists will be adequate to meet our past experienced growth rate in the next three years. However, should there be a sharp increase in the need and demand for specialty training, our present facilities operating under the two year post-graduate requirement will not be adequate.

Medicine has experienced such a sharp increase in the need and demand for specialty training. If we examine the growth rate of full time specialists in medicine, we find that in 1931, full time specialists in private practice amounted to 17 per cent of the total. Between 1931 and 1964, the number of physicians in private practice increased by 30 per cent while the full time specialists in private practice increased by 381 per cent.\*

Another method of estimating the needs and/or demands for specialists is to plot a curve of growth over the past ten years and from this develop a "curve of probability" for the next three years.

### CONCLUSION

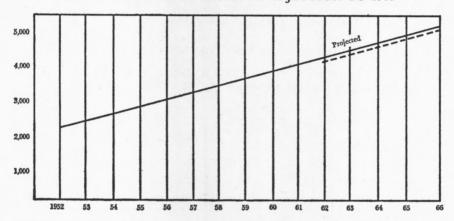
This report is essentially a progress report and while the Committee is not prepared to report its conclusions at this time, the reader is encouraged to do so. There are many facets to this general

<sup>\*</sup> Progress in Health Services: Health Information Foundation, The University of Chicago, Chicago, Illinois, Vol. XIII, No. 3, May-June, 1964.

area of the dental specialties that may be studied in the years ahead These facets include:

1. Breakdown on production of specialists and the need and demand for their services by specialty groups.

# TABLE III\* GROWTH OF THE NUMBER OF SPECIALISTS IN THE UNITED STATES 1952-1962 AND PROJECTION TO 1966



- \* If the associate members of the American Association of Orthodontists are listed as specialists, the total number of specialists will be increased by more than 800 between 1962-1966.
- 2. Differences in production, need and demand for their services by regions.
  - 3. The current and future need for specialists.
  - a. Determination of patient load in respective areas of practice.
- b. Percentage of specialty practice based on referrals from general practitioner. Comparison on a five-year basis.
- 4. Consideration of possible grouping of specialty areas and consideration of combining practice of several closely allied special groups (for example, combined practice of endodontics-periodontics).
  - 5. Consideration of possible future areas of specialization.
  - 6. Definition of areas of responsibility of respective specialty areas.
  - 7. Ethical considerations associated with specialty practice.
- 8. Special qualifications vs. limitation of practice as the basis for "specialization."

- 9. Professional relationships between specialists and general practitioners.
  - 10. Is specialization in the public interest?
  - 11. The number of specialties—how far should we go?
- 12. State licensure of specialists vs. voluntary certification by national boards.

(James R. Cameron and Paul E. Boyle have replaced Drs. Heinze and Ebert on the 1965 Committee. This Committee has selected as the next area for study, "Professional Relations Between Specialists and General Practitioners." This will be a two year study with a progress report at Las Vegas in November.)

### SAMPLE QUESTIONNAIRE AND LETTER

# WE WILL COMPLETE SPECIALTY TRAINING (2 POSTGRADUATE YEARS) FOR THE NUMBER OF DENTISTS AS LISTED.

	1964	1965	1966
Orthodontics			
Oral Surgery			
Periodontics			
Pedodontics			
Prosthodontics		N (	
Endodontics			
Public Health	1		
Oral Pathology			

School or Institution-

March 3, 1964

Dean, School of Dentistry Director, Dental Institute

The Committee on Specialties and General Practice of the American College of Dentists is seeking some factual information on the output of specialists by the schools and institutes in this country. At a later date, the Committee will study the need and demand for specialists in the eight recognized specialty areas.

The enclosed post card can be completed in a few moments. We do not wish a detailed research by each school and your estimate will be quite satisfactory. Thank you for your help in this matter.

Sincerely yours,
WILLARD C. FLEMING, D.D.S.
Chairman, Committee on Specialties
and General Practice

# Board of Regents Meeting

APRIL 9 AND 10, 1965, ST. LOUIS

### IMAGE WORKSHOP RECOMMENDATIONS

The most important consideration was that given to the report of the Committee on Social Characteristics. This Committee had studied and evaluated all of the material presented at the Workshop on Enhancing the Image of Dentistry, St. Louis, January 17-20, 1965. The data included the key papers, study group reports, general assembly modifications, and the several summaries. Fourteen recommendations were submitted to the Regents. These were approved and referred to appropriate committees of the College for prompt development. The recommendations and actions appeared in the July 1965 Journal, pages 264-270.

### FURTHER STUDY OF 1962 GRADUATES

The College financed a study of the entering dental students in 1958. The results, "The Dental Student," was published in the JOURNAL, March 1961.

A second study of this class, "The Dental Student—Approaching Graduation, 1962," appeared in the JOURNAL, September 1962.

A third, follow-up study of the Class of 1962, five years after graduation, was approved by the Regents. It is planned that Washington University in cooperation with Nathan Kohn, Jr. will conduct this survey.

### MISCELLANEOUS ITEMS

The College membership, January 1, 1965, was 3,436.

It was announced that the sub-committee of the Committee on Research.

who plan and administer the sessions of the Institute for Advanced Education in Dental Research, would hold a breakfast meeting during the July, 1965, meeting of the International Association for Dental Research at Toronto. Plaques would be presented to the trainees of 1963 and 1964.

The College will participate in the 1967 Paris meeting of the Federation Dentaire Internationale.

Beginning plans were discussed for the Fiftieth Anniversary meeting of the College in 1970.

Carl A. Ostron was asked to represent the College at the Dental Student Conference, Washington, D. C., April 23-24, 1965.

The sum of \$100.00 was given to the William N. Hodgkin Memorial Fund in recognition of his loyalty and years of service to the College.

The budget for 1965-1966 was adopted.

### CENTRAL OFFICE

Dr. Brandhorst reported on the 1965 Las Vegas program and convocation. A special program, "Optimum Health for the Individual in the Social Order," will be presented on Saturday afternoon, November 6. "Health Care for the American People" will be the theme of the Sunday morning meeting. The convocation speaker will be Joseph C. Robert, Professor of History, at the University of Richmond.

The Regents approved an outline for broader administrative procedures in the Central Office. Miss Fern Crawford was designated Administrative Assistant.

# Institute for Advanced Education In Dental Research

### ANNOUNCEMENT OF 1966 SESSIONS

The Institute for Advanced Education in Dental Research announces its 1966 sessions. The purpose of the Institute is to provide an opportunity for bringing promising investigators in dentistry into intimate relationship with senior scientists in basic and fundamental research who are making significant contributions in their fields. By making such a contact sufficiently long and informal, a broader and deeper understanding should develop concerning dentistry's problems and fruitful ways to attack them. The American College of Dentists sponsors the Institute, and is aided in this activity by a grant from the National Institute of Dental Research.

The fields of study for 1966 will be bacteriology, immunology, transplantation, tissue culture. Sessions will be held at the Rosewell Park Memorial Institute at Buffalo. The first session will be from May 16 to May 27; the second from October 10 to October 14.

The trainees are selected not only on their record of accomplishment and promise for the future, but also on their ability to add to the dialogue that comprises the curriculum. Further, the trainees are selected to provide the greatest variety of disciplinary representation pertinent to the areas being considered. Special effort is made to select investigators whose work is allied closely to the emphasis in the areas under consideration. The Institute reimburses the trainees for their travel expenses and pays a stipend based on the cost of their living.

Investigators interested in attending the Institute should write Dr. O. W. Brandhorst, Secretary, American College of Dentists, 4236 Lindell Blvd., St. Louis, Missouri 63108. A curriculum vitae and a statement indicating special interest in the fields of study with a list of publications should accompany the application.

Applications should be sent to Dr. Brandhorst before February 1, 1966.

# Correspondence and Comment

THE DENTAL NURSE. Dr. Dario Restrepo, Regional Adviser in Odontology, Pan American Health Organization, World Health Organization, Washington, D. C.

We are interested in the distribution among the Latin American public health dentists of the article entitled "The Dental Nurse," written by Sir John Walsh, which appeared in the JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS, Vol. 32, pp. 62-69, April 1965.

For this purpose we will appreciate very much your authorization for the distribution and translation to Spanish of the paper above mentioned.

(The JOURNAL granted permission. This article also was reprinted in a recent issue of the *Journal* of the American Dental Hygienists' Association. [T.McB.])

THE IMAGE OF DENTISTRY. John Oppie McCall, D.D.S., periodontist and editor, 262 Fairhaven Mall, Jericho, N. Y.

I have read with great interest but with some disappointment the presentation on the "Image of Dentistry" in the July 1965 JOURNAL.

Satisfaction derives from the very complete coverage of the subject and from the recommendations made by the Study Groups handling the various topics assigned to them.

Disappointment comes from a feeling that too little attention was paid to certain points of outstanding importance. To me, the most important image of dentistry—the image that most needs enhancement—is the image of dentistry in the eyes of the medical profession and the public. By "public" I mean the public as a whole—subdivisions have little importance in my opinion. Improvement of the image in the eyes of dentists will take care of itself once needed improvement in dentistry itself has been made.

Improvement in dentistry, as I see it, depends on two prime items: broadening the education of the undergraduate student so as to bring the curriculum more in line with current advances in the medical as well as the dental sciences. The intent there is to make the dentist more an oral physician than is the case at present, and to bring into the profession men and women of such caliber that they will command the respect that dentistry needs.

It seems then that the improvement of the dental curriculum must be the first order of business, with the thought that only following such improvement will the effort to attract the superior student I have in mind be successful. I feel that the dental profession must be prepared to show these potential dental college entrants that dentistry has something to offer that will stimulate their imagination and tax their mental capacity, and also that dentistry offers an opportunity to give real help to the people in an important area of health service.

One shortcoming in the Workshop

A department under this heading was initiated in Volume 1 (1934) of the JOURNAL by William J. Gies, then the Editor. It is being continued as circumstances permit.

Readers are invited to submit discussion for publication; letters to the Editor also will be considered. Because of space limitations, contributions for this department should be brief and direct. (T.McB.)

presentations as published was a failure to make it clear that prevention of dental disease includes prevention of periodontal disease as well as dental caries. It still seems to be the attitude of the profession that dental caries is the Number One dental disease and that the major function of the dentist is to fill cavities and to construct restorations to replace teeth lost from that disease.

This absorption of dentists in caries does little to enhance the image of dentistry in the eyes of those with whom dentistry is or should be concerned. Actually, it is through the prevention and management of periodontal disease, with its close and demonstrable systemic interrelationships, that dentistry will best project its image to those it desires to impress.

In an aside, I might mention that in the matter of assuring the patient that his dentist is solicitous about him as a human being (Study Group II, page 227) it is stated that tests for assessment of "integrity and human interest" should be included in tests of applicants for entrance to the schools. One wonders how such a test can be set up and administered.

It probably is not strange, although seeming so at first glance, that the most pertinent and objective of the presentations in the Workshop were those of lay members of the panel—Russell S. Poor and Nathan Kohn, Jr. In this connection attention might be called to the fact that Dr. Poor's remarks on improving interrelations were not followed up in the later recommendations. I assume that this was an unintentional oversight, but unfortunate nevertheless.

COMMENT: Daniel F. Whiteside, 4502 Delmont Lane, Bethesda, Maryland.

One suggestion for the "Correspondence and Comment" section: Give the

individual whose paper is receiving comments an opportunity to defend his position in the same issue which carries the reader's comments.

I make this suggestion after reading the January issue of the JOURNAL in which Dr. Salzmann comments on the editorial "Teaching 'Social Dentistry'" by Walter J. Pelton. It would have been delightful to read Dr. Pelton's reply in the same issue.

Can't some system be developed whereby the author replies to the reader's comments and both letters be printed in one issue?

(Indeed, yes! From now on the JOURNAL will endeavor to do just what Dr. Whiteside has suggested. [T.McB.])

COMMENT: Frank J. Orland, Editor, Journal of Dental Research, January-February 1965, "Editorial Views and News," Chicago, Ill.

The experience of several participants in last year's Institute for Advanced Education in Dental Research [sponsored by the American College of Dentists and supported by a grant from the National Institute of Dental Research, USPHS] indicated it was such a success that the Editor felt a full description of the Institute for 1965 should be provided for future reference. We all agree with Thomas J. Hill in his communication to this office that the Institute fills a purpose that no other type of meeting or conference can fulfil, and hence it can be stated unequivocally that it should continue as an effective educational device for developing active researchers interested in the oral area.

(The communication by Dr. Hill, mentioned above, followed the comment by Dr. Orland. See also a description of the Institute by Dr. Hill in the JOURNAL, January 1965, pp. 42-45. [T.McB.])

THE DENTAL NURSE. Ronald Reiser, The University of Toronto, Undergraduate Dental Journal, Toronto, Canada.

I should like to request permission to reprint the paper, "The Dental Nurse," by Sir John P. Walsh, that appeared in the April 1965 issue of your JOURNAL.

(The Journal granted permission. [T.McB.])

AMA REJECTS MEDICARE BOY-COTT. Newsletter, American Dental Association, Monday, October 11, 1965.

The House of Delegates of the American Medical Association at a special session last week [of October 4] overwhelmingly rejected proposals for a physicians' boycott of the Administration's health care program. Instead, the delegates voted for resolutions under which physicians who are AMA members, may refuse to participate in the program as individuals provided they do not violate ethical obligations to patients. In essence, the AMA House reaffirmed the position taken at its June meeting in New York. AMA President James Z. Appel of Lancaster, Pa., addressing the special session, urged physicians to act with "restraint and prudence" on the federal health care program. added: "Our two present objectives should be (1) to meet the immediate situation in the most statesmanlike manner possible and (2) to prepare for the next infinitely more crucial battle over means of financing the health of the entire nation." Calling for a unified medical profession "or we fail in our stewardship to humanity," Dr. Appel urged physicians to take a more active part in political elections in an effort to modify objectionable features of the federal health care program and to influence other legislation.

THE IMAGE OF DENTISTRY. Matthew Mitchell, D.D.S., orthodontist and editor of the Journal of the District of Columbia Dental Society, 700 13th Street, N.E., Washington, D. C.

I have read thoroughly and with interest the July issue of the JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS. This issue of your JOURNAL is one that I wish could be placed in the hands of many, many more dentists and others than it will reach through your mailing lists. I look forward to each issue of the JOURNAL with great anticipation and expected rewards. I am never disappointed.

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(September, 1965)

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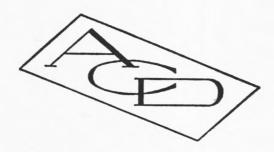
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# The Objectives of the American College of Dentists

The American College of Dentists, in order to promote the highest ideals of the dental profession, advance the standards and efficiency, develop good human relations and understanding with our patients, and extend the benefits of dental health services to the greatest numbers, declares and adopts the following principles and ideals as ways and means for the attainment of these goals:

- (a) 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;
- (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 urge the development and use of measures for the control and prevention of oral disorders;
- (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.

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 all the 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 the Preamble in the Constitution and Bylaws of the American College of Dentists.

