

# JOURNAL

## AMERICAN COLLEGE OF DENTISTS



**CELEBRATING A CENTENNIAL:  
MEHARRY MEDICAL COLLEGE**

**NET INCOME:  
STATISTICS ARE CONFUSING**

## *Purposes and Objectives of the American College of Dentists*

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

- (a) To urge the extension and improvement of measures for the control and prevention of oral disorders;
- (b) To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all and to urge broad preparation for such a career at all educational levels;
- (c) To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;
- (d) To encourage, stimulate and promote research;
- (e) To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;
- (f) To encourage the free exchange of ideas and experiences in the interest of better service to the patient;
- (g) To cooperate with other groups for the advancement of inter-professional relationships in the interest of the public;
- (h) To make visible to the professional man the extent of his responsibilities to the community as well as to the field of health service and to urge his acceptance of them;
- (i) To encourage individuals to further these objectives, and to recognize meritorious achievements and the potentials for contributions to dental science, art, education, literature, human relations or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.

# The JOURNAL

Volume 53  
Number 2  
Summer 1986

## of the AMERICAN COLLEGE of DENTISTS

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

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The Journal of the American College of Dentists (ISSN 0002-7979) is published quarterly by the American College of Dentists, Inc., McFarland Company, Harrisburg, Pennsylvania, with Second Class Postage paid at Harrisburg, Pennsylvania and additional points. Copyright 1986 by the American College of Dentists, Inc.

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

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For bibliographic references the *Journal* is abbreviated J Am Col Dent and should be followed by the volume number, page, month and year. The reference for this issue is J Am Col Dent 53:1-48, Spring 1986.

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# THE HONOR OF FELLOWSHIP

A while back, the American College of Dentists received a letter from a dentist who had been nominated, was accepted and had received his formal invitation to membership in the College. His reply, rejecting the invitation, is condensed as follows:

Dear Sirs,

I am going to decline the invitation. While I am gratified to be nominated, I see no real advantage for me to join the organization.

I cannot see paying to be inducted and then paying dues to an organization that serves no scientific purpose. I have tried to find out what activities the College undertakes and I find very little to warrant my belonging.

I belong to so many professional organizations whose meetings and activities are meaningful and progressive that I feel I cannot join what is, at best, only an honorary society.

Yours truly,  
Dr. X

It is sad, indeed, that Dr. X is so poorly informed about what the American College of Dentists stands for. When his first concern is, "What do I get out of it," he is exhibiting an attitude that does not befit a Fellow of the College, but it certainly points out his personal priorities. Fellows, generally, are a group of doers and givers, not takers.

It is regrettable that Dr. X did not take the time to investigate the impressive and rich heritage of the American College of Den-

tists which is dedicated to the highest possible ideals for dentistry and to its service to humanity. Reading the inspiring history of the College and looking through the names and pictures of the early giants in dentistry—the who's-who of the dental profession in the 20th century—leaves one in awe at their dedication and selflessness.

Dr. X did not find College activities in the scientific field because, while the interest of the College is directed to all phases of dentistry's welfare, its attention is mainly directed to the non-technical problems, namely those dealing with social issues, professional relations and scholarly matters. The highly respected Journal of the American College of Dentists is the only dental publication that deals primarily with ideas and opinions in dentistry and provides a national forum in which those concepts can be published.

The College has provided considerable direction for the profession and has accomplished much since it was established in 1920. One of its early actions was to influence the profession to remove dental journalism from the control of dental trade companies and place it under the ownership and control of the dental profession. The College established the American Association of Dental Editors in 1931. William John Gies who was so closely associated with the College was the founding editor of the Journal of Dental Research.

In more recent years, the College has continued to provide leadership and service to the dental profession. One current College project is a

# FROM THE EDITOR'S DESK

history of the development of organized dentistry as viewed and remembered by the late Dr. Harold Hillenbrand from events during his long tenure as Executive Director for the American Dental Association. This book should be a significant contribution to dental history.

Dentistry looks to the American College of Dentists as the conscience of the profession. The College strongly advocates the need for the highest ethical standards and ideal professionalism for the entire dental profession.

Every important profession, science or art has its Academy, Legion or Court of Honor to which are elected people of outstanding prominence in that field. Medicine has its American College of Surgeons. Therefore, the American College of Dentists was created to encourage a higher type of professional spirit and a keener sense of social responsibility for the dental profession. Membership in the College was intended to be an honor, a mark of distinction and a coveted prize for those dentists who deserve recognition because of their contributions to the profession.

The current membership of the American College represents approximately 4% of the members of the American Dental Association. The great majority of Fellows feel very proud to have the "F.A.C.D." as a recognition by their peers of their outstanding professional contributions. They hold in high esteem the honor of Fellowship.

Apparently Dr. X has a different set of values in life.

Keith P. Blair

# NET INCOME

## So, How Much Do Dentists Earn? Statistics Are Confusing.

H. Barry Waldman\*

Determining dental practitioner income is more than just a statistical exercise. The reports of variations over time in practitioner income impact on all aspects of the profession—including the recruitment of young men and women to the schools of dentistry, changes in the fees of particular procedures as individual dentists seek to keep pace with reported incomes, and dental programs sponsored by government agencies, insurance companies and labor unions. But most important, accurate determination and presentation of the changes in the economics of dental practice in the mid 1980s would provide the necessary assurance that the profession has passed beyond the economic reverses of the past recession.

Yet, even a cursory reading of reports by the American Dental Association, federal agencies and the profession's trade publications, presents practitioners and health planners with a perfusion of data which can raise more questions than they answer. The reality is that, often these reports and evaluations are not readily available to most practitioners or they are based upon questionable data

headlined in publications about the profession. For example, the improving economics of dentistry in 1984 are high-lighted on the front cover and the lead article in the September 1985 issue of "Dental Economics".<sup>1</sup> But, the data are based on a "record of 2,457 dentists responding to Dental Economics' 1985 Practice Survey . . ."—which represents a response rate from *LESS THAN* 3% of all the practitioners to whom "Dental Economics" (which includes the questionnaire) were mailed. (see below)

Whether the income figures listed in the "Dental Economics" article or any other presentations are a reasonable representation of the income of the "average" practitioner, probably is irrelevant to the individual dentist who mentally compares his/her earnings to the published data. Sampling procedures, response rates, standard deviations, confidence intervals etc. (statistical concepts that may have been presented years before in dental school) unfortunately seem like so much text book drivel when one's income does not match headlined reports.

But the sources of data, sampling and associated statistical procedures can have pronounced impact on the perceptions of the economic health of the profession. For example:

**NEGATIVE VIEW OF DENTAL ECONOMICS**—For those interested in negative views of develop-

ments in the economics of dentistry, there are the annual reports on practitioner income provided by the Internal Revenue Service. According to income tax return data, between 1973 and 1983, solo owners of dental offices have reported a doubling in business receipts, but only a 50 percent increase in net profit. However, in terms of constant dollars (removing the effects of inflation), solo practitioners reported a one third decrease in "real" net income between 1973 and 1983. (Table 1) In addition, between 1981 and 1983, solo owners of dental laboratories reported a one third decrease in "real" profit. (Table 1)

**POSITIVE VIEW OF DENTAL ECONOMICS**—For those interested in positive views of developments in the economics of dentistry, there are any number of reports issued by the American Dental Association and the profession's trade magazines.

1. By the early 1980s, dental practitioner mean and median net income (as reported by the ADA and "Dental Management" publications) had passed the \$50,000 level. (Table II)
2. "Dental Economics" reported that the decrease, during the late 1970s-early 1980s recession, in the percent of practitioners in the modal net income category of \$50,000-\$75,000 had been reversed in the mid 1980s. (Table II)

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**Table I. IRS data—Number of sole owner dental offices and dental laboratories, business receipts and net profit per owner and constant dollar profit per owner: 1973-1983 (2-4)**

Tax Year	Dental offices			
	Number of sole owners	Business receipts per owner	Net profit per owner	Constant dollar profit per owner
1973	86,273	\$ 53,462	\$25,493	\$19,153
1974	82,630	58,446	27,007	18,359
1975	82,735	62,410	29,020	18,002
1976	86,273	70,451	31,829	18,668
1977	82,560	74,294	33,689	18,561
1978	86,987	78,907	33,751	17,282
1979	84,926	79,881	33,459	15,369
1980	82,265	85,768	35,827	14,504
1981	85,517	89,780	35,456	13,021
1982	78,468	98,693	36,295	12,576
1983	71,918	106,713	36,751	12,357
Dental Laboratories				
1981	6,772	\$ 42,130	\$16,541	\$ 6,074
1982	13,923	35,823	12,321	4,269
1983	13,107	37,812	11,714	3,938

3. In 1984, dental equipment and supply industry shipments increased by an estimated 2.5% following a decline in shipments in 1982 and an upturn in 1983. The value of industry shipments is expected to increase by 2.9% in 1985. In addition, industry shipments in the 1985-89 period are projected by the U.S. Department of Commerce to grow at a compounded annual rate of 2.6% (Note: all changes are after adjustment for inflation) Industry employment was about 17,200 in 1984—an increase of 6% from 1983.<sup>16</sup>
4. In 1984, the percent increase in dental expenditures for dental services was: a) more than 1 1/2 times the percent increase for overall health expenditures; b) 1 1/2 times the percent increase for phy-

**Table II. Reported dental practitioner net income by reporting source: 1974-1984 (1,5-15)**

	American Dental Association*			Dental Management**		Dental Economics**
	Mean	Median	Mode	Mean	Median	Mode \$50,001-\$75,000
1974	\$34,000	\$30,500	\$25,000-\$34,999 (29.2%)			
1975					\$37,500	
1976	\$44,619	\$41,000	\$45,000-\$54,999 (17.1%)			
1978	\$48,363	\$44,619	\$65,000 & over (19.9%)			
1979					\$43,467***	27.5%
1980				\$59,175****		23.5%
1981	\$57,517	\$50,000				
1982						24.0%
1983	\$62,650	\$60,000		\$61,405		25.6%
1984				\$54,726 (unincorporated) \$88,387 (incorporated)		26.0%

\*Data are for independent practitioners—This includes dentists who are sole proprietors, dentists practicing in an incorporated practice as a shareholder or in partnerships. The majority of all dentists (93.2% in 1981) are independent dentists.

\*\*Data are for all dentists

\*\*\*Data presented in the January 1981 issue of the publication with no indication when data were collected. Assumption made that the data were collected sometime during the year prior to the publication year and covered the year prior to that of data collection.

\*\*\*\*Weighted average developed by author from regional data

sician expenditures; and c) 2 1/2 times the percent increase for hospital treatment.<sup>17</sup>

## BUT THERE ARE DIFFICULTIES—

### 1. Availability of information—

Since the 1975 Survey of Dental Practice, the American Dental Association consistently has provided an increasingly valuable representation of the practice activities of U.S. dentists. (Methodology problems in prior Surveys preclude comparisons of more recent data with that secured from earlier Surveys.) However, at the present time, the Association only provides summary data from the Survey of Dental Practice in the "Journal" and "ADA News". Interested practitioners and health planners must request copies of the Survey report from the Association. In prior years, complete sections of the report were provided in the "Journal".

While the general readership of the "Journal" and the "ADA News" can review the changing mean income levels of practitioners (median levels are not necessarily provided<sup>21</sup>) most ADA members do not have more than the summary information and cannot appreciate the wide dispersion of practitioner incomes. For example, in 1983 the mean total net income from dentistry for independent dentists (see Table II for definition) was \$62,650. The standard deviation for the sample data was \$38,470. If the sample was distributed normally (the median for the sample population was \$60,000—which would indicate that to some extent data for the sample population were skewed), approximately 68% of the 2,070 respondents (plus or minus one standard deviation) reported an income between \$24,180 and \$101,120. (Table III) While practitioners may not recall the definitional particulars of standard deviations, the inclusion of comparative large standard deviations would alert the readers to the marked variability of the

data. Without this information, practitioners are left to compare their individual incomes to the mean figures presented in the "Journal" and "ADA News", but are unable to review their relationship to the wide range of income levels reported by their colleagues.

**2. Changing practice arrangements—**Practice modalities have become so diversified, including corporate and non-corporate cost sharing arrangements, solo and partnership practices, part and full-time employment, primary and secondary activities (e.g. teaching, dental consulting, part-time activities in a hospital), any reporting agency has difficulty in identifying practitioner income. This difficulty is increased dramatically when efforts are made to compare changes in the economics of dentistry over lengthening periods of time. In addition, there are the usual problems of presenting region, state and practitioner age variations in some meaningful manner.

**3. Presentation of information—**The actual presentation of the data is in itself a dilemma. Editors have attempted any number of data presentations, from the colorful, visually attractive charts and drawings in the trade publications to the usually more staid presentations by the ADA. But more important than the use of color graphics is the differing and changing presentations of survey information. The comparison of information from different

publications is all but impossible for the individual practitioner, who is confronted by the changing and varying use of modes, medians and means to present survey information (with no related statistical material for interpretation). (Table II)

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According to income tax return data, between 1973 and 1983, solo owners of dental offices have reported a doubling in business receipts, but only a 50 percent increase in net profit. However, in terms of constant dollars (removing the effects of inflation), solo practitioners reported a one third decrease in "real" net income between 1973 and 1983.

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In the event a practitioner attempts to determine whether his/her net income to gross receipts ratio approximates general national averages, even further problems arise. The ADA, "Dental Management" and "Dental Economics" present information in different and changing practice classifications, geographic regional variations, and use differing mathematical procedures. For example, in its 1985 report, "Dental Management" determined the ratio of overhead costs to gross receipts for incorporated and unincorporated practitioners by dividing the

**Table III. ADA reported mean net practitioner income, and plus or minus one standard deviation: 1974-1983 (4-6)**

	Mean	Standard Deviation	Minus One Standard Deviation	Plus One Standard Deviation
1974	\$34,000	\$21,750*	\$12,250	\$ 55,750
1976	44,619	22,909	21,710	89,232
1978	48,363	27,554	20,809	75,917
1981	57,517	34,458	23,059	91,975
1983	62,650	38,470	24,180	101,120

\*Converted from reported standard error

mean overhead costs for *each category* by the reported gross receipts "for the total sample." (Table IV)

The importance of net income to gross receipts ratios takes on particular importance for health planners as they attempt to evaluate changing national dental expenditure patterns. For example, in 1984, spending for dental care increased faster than spending for overall health care, hospital treatment and physician services.<sup>17,22,23</sup>

The increase in national dental expenditures has resulted in a constant dollar *increase* in dental expenditures per dental practitioner—a reversal of the downturn that occurred during the last recession. (Table V) But, *which ratio* of net income to gross receipts ratio should now be used to determine national changes in the net income of dental practitioners?

**4. Survey procedures**—The widespread publication of data based upon inadequate survey procedures is a particular problem in determining practitioner income levels.

a. The information reported by "Dental Economics" is developed from surveys with a response rate of approximately 2.5% or less.

"Over 2,500 dentists from every state in the nation re-

**Table V. Number of active private dentists, current and constant dollar national expenditures for dental services per dentist: 1979-1984 (22-26)**

	Number of private dentists	Expenditures in current dollars/dentist	Expenditures in constant dollars/dentist
1979	104,905*	\$126,781	\$58,236
1980	108,672	141,709	57,372
1981	112,439	153,861	56,504
1982	116,208*	167,802	58,143
1983	119,975	181,704	61,179
1984	123,742	202,841	65,943

\*Represent reported data by the ADA for active private practitioners. Data for other years were estimated by prorating the ADA data.

sponded to the (1980) survey mailed to over 100,000 dentists." (13)

"Over 2,000 dentists participated in this year's (1981) practice survey, with 2,009 valid questionnaires tabulated." (14)

"A record 2,457 dentists responded to *Dental Economics'* 1985 Practice Survey . . . (1)—*note the inconsistency with statement from the 1980 study.*

In addition to a limited response rate, "Dental Economics" reports in its latest survey (which com-

pares data with two previous studies) that, "Overall, respondents to our survey are getting older, reflecting national population trends, and they are practicing longer."<sup>1</sup> While the aging of the respondents may reflect "national population trends," the aging of the respondents runs counter to the decreasing median and mean age of dentists in the United States.<sup>27,28</sup>

b. The problems of response rate and representativeness of respondents to the general population is continued in the Journal of Clinical Orthodontics (JCO) studies of orthodontic practice activities.<sup>29-31</sup> The 1981 JCO study

**Table IV. Ratio of practitioner mean net income to gross income by source\*: 1978-1984 (6,7,9-12)**

	American Dental Association			Dental Management					
	Solo	Non solo	Independent	All dentists	All dentists Regional Range	Incorporated All dentists	Solo dentists	Unincorporated All dentists	Solo dentists
1978	42.3%		42.1%**						
1979				39.6%***					
1981	40.1		43.1		27.5% South West 54.4 N. Mountain				
1983	37.4	48.7%	40.3						
1984****						55.8%	54.6%	34.6%	34.8%

\*"Dental Economics" presents gross and net income data in income category ranges

\*\*Weighted average developed by author for comparative purposes

\*\*\*Median data

\*\*\*\*"Dental Management" determined the ratio of overhead costs to gross receipts for incorporated and unincorporated practitioners by dividing the mean overhead costs for each category by the reported gross receipts for the total sample. The complement of these figures are presented above.

**Table VI. Orthodontist and specialist median net income by data source: selected years 1974-1983 (4-6,29-31)**

Year	American Dental Assoc. Survey of Dental Practice		Journal of Clinical Orthodontics Study
	Orthodontists	All Specialists	Orthodontists
1974	\$40,000	\$40,000	
1976	58,000	55,003	
1978	62,015	60,000	
1980			\$102,000
1981		72,000*	
1982			124,000
1983		80,000*	
1984			127,603

\*In 1981 and 1983, the ADA grouped incomes for all specialists. ADA median income data for 1974, 1976 and 1978 indicate that orthodontist median income approximated the median income of all specialists.

was carried out by mailing a questionnaire,

"to all those who could be identified as being in the active private practice of orthodontics in the United States. A total of 7558 questionnaires were mailed, and 1291 useable responses were received . . . (or) approximately 17% . . . (29)

The American Dental Association employed a similar mailing procedure prior to the 1975 ADA Survey of Dental Practice. In earlier studies, the ADA mailed

. . . in 1984, spending for dental care increased faster than spending for overall health care, hospital treatment and physician services.

questionnaires to between 35,000 and 41,000 dentists. A response rate of slightly more than 20% was received in the 1965, 1968 and 1971 studies. The limitations of such a procedure were recognized and resulted in major sampling changes in the 1975 and subsequent ADA Surveys.<sup>18-20</sup>

In contrast to the JCO studies, the ADA uses a *stratified* random sampling technique with follow-up of non-respondents. The response rate to the 1984 ADA Survey of Dental Practice (covering 1983 practice activities) was approximately 52%.<sup>15</sup> (In the 1984 "Dental Management" study, 32% of a random *non-stratified* sample of 2,500 dentists responded to mailed questionnaires.<sup>12</sup>) Without some confirming evidence, particularly when non-respondents constitute over eighty percent of a mailing, there must be doubts as to whether the JCO respondents rep-

resent an unbiased sample for the entire population of orthodontists.

Even if we could eliminate a discussion of sampling and related procedures, since the Journal of Clinical Orthodontics studies report median net income statistics that are 50% greater than those reported by the ADA, orthodontists would be confronted with the problem of determining the actual earnings of members of their specialty. (Table VI)

**5. Dates of study**—With all the problems of statistics, presentation of material, etc., the proper dating of the study seems almost trivial. Yet, because of the frequent absence of statements regarding the year to which the data applies, or the usual procedure of using the year of publication as the title of the study report, the reader is either uncertain or automatically assumes that the information applies to the title year of the study. For example:

A. The ADA Survey of Dental Practice consistently uses the year of publication for the title of the Survey, yet the data most often applies to the previous year.

b. "Dental Economics" at times has used the year of publication in the title of its survey information, but covers data from the previous year. The confusion is increased further by the publication late in a particular year; thereby lending credibility to the thought that it applies to the title year (e.g. the September 1985 issue presents the lead article, "1985 practice survey shows dentists' income increasing"<sup>1</sup>—actually covers information for 1984).

c. "Dental Management" presented "Dentists' income: an exclusive DM survey"<sup>9</sup> in the January 1981 issue, but with no indication when the information was collected and to what period it applies. One would have to assume that the information was collected during 1980 and applies to 1979? In more recent survey reports, "Dental Management" has been more specific with their data presentation.

**SO, HOW MUCH DO DENTISTS EARN?**—Unfortunately, the answer to this all important question is lost in a perfusion of data that often defies the busy practitioner's understanding. The American Dental Association is making particularly positive efforts to solve this problem and should be encouraged to provide the "Journal" and "ADA News" readership with information in a more useful and consistent format. Until that time, practitioners must use extreme care when they compare their own practice activity with that of the "average" dentist and health planners must use caution in evaluating economic developments of the dental profession!

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*The following introductory remarks were made by Dr. H. Curtis Hester, Vice President of the American College of Dentists and Program Chairman for the Symposium held on November 2, 1985, at San Francisco during the Annual Session of the American College of Dentists.\**

"Fellows of the American College of Dentists, Candidates For Fellowship and guests. This morning's panel discussion is directed

\*Editor's note:

Dr. John W. Traubert's presentation at the Symposium is presented on this page. Dr. Eckenhoff's and Dr. McCallum's papers appeared in the Spring 1986 issue of the Journal of the American College of Dentists.

toward the theme of the 1986 Annual meeting of the College which is entitled, "Professional Relationships". The subject specifically to be addressed by this panel is "The Role of Medicine and Dentistry In Total Health Care".

We have three outstanding educators from the highest level of academic life. They will address this subject from both the administrative as well as the direct instructional point of view. The panelists' present their positions from their wide ranging experience in the health field. They are, James E. Eckenhoff, M.D., distinguished physician of the Veterans Administration, immediate past president of McGaw Medical Center and Dean of the Northwestern Univer-

sity Medical School; Charles A. McCallum, D.D.S., M.D., Senior Vice President of Health Affairs at the University of Alabama in Birmingham who is currently Vice Chairman of the Board of Commissioners of the Joint Commission on Accreditation of Hospitals and John W. Traubert, M.D., Professor and Chairman of the Department of Family Medicine at West Virginia University School of Medicine, at Morgantown, West Virginia. He is also the Director of the Family Practice Residency Program.

In 1935, during its 15th year, the American College of Dentists sponsored a Symposium on Medico-Dental Relationships, at its Annual Convocation. The purpose of that

## POST GRADUATE DENTAL/MEDICAL

**John W. Traubert\***

The first General Practice Dental Residents started training at the WVU Medical Center in 1963. It was not until 1974 that the Family Practice Department at the West Virginia University Medical Center accepted the first M.D. residents. In 1975 the Dental General Practice Residency was physically incorporated with the Family Practice Medical Residency in one center. To date 50 General Practice Dental Residents have completed the program and 51 Family Practice medical Residents have graduated.

Sharing conference time on a scheduled basis with lecture to dentists and physicians from dental and medical faculty is easily accomplished in such a setting. Dental and Medical Residents do not realize how much they have gained from shared conferences until they are in practice and encounter various medical and den-

tal problems.

The Dental-Medical relationship has developed a very positive and active role in Continuing Education. The annual CME programs that are sponsored for primary care physicians frequently have dental topics included. These are always well received and unique to the programs.

Family Practice Physicians have been invited to numerous dental conferences to give presentations on hepatitis, diabetes, heart disease, etc.

Infants and children involved in the Family Practice Center see the dental office at each visit. Developing good dental habits early is rather easy when the dentist is presented as friendly and non-threatening in a familiar setting.

The training of primary care physicians and dentists in the same setting will become increasingly important. As our population ages, good health will result from the combined efforts of both the physician and the dentist—good oral hygiene plays such an impor-

tant role in good nutrition and good health. As our population ages and requires more medications, dental care becomes more complex. Awareness of medical problems and treatment modalities minimize health and dental risks.

One cannot talk about such unique educational program without mentioning the hallmark of success. What is so special about this teaching and learning center? In education there are teachers who teach, teachers who teach about and teachers who do. All of the faculty at the Family Practice Center at the West Virginia University Medical Center actively practice within the center. Dental and Medical residents see and watch their mentors in a day to day practice. The faculty members are observed in their successes as well as their failures. Residents see faculty squirm and perspire like colleagues. Faculty are observed taking calls, handling unpleasant patients and performing a share of routine chores.

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Symposium and the subsequent publications of the presentations was an effort to improve the medical-dental relations and clarify misunderstandings. Participating in that program was the legendary William J. Gies. In his opening remarks, Dr. Gies stated, "The object of this meeting is to call to the attention of the members of both the medical and dental professions the close relationship existing between systemic and dental diseases, and to stimulate more interest and greater cooperation between the practitioners in the care of their patients, to the end that the public shall receive better service."

The 1983 report of the American Dental Association Special com-

mittee on the future of Dentistry and the current American Medical Association project, "Health Policy Agenda", would seem to make a study of medical-dental relations again timely and relevant. In general, today there is more awareness of professionally related problems. Where there are close personal relations between physicians and dentists, the professional relations seem to have flowered to the greatest degree. However, there are still medical institutions with little, if any, emphasis or input from the special area of dental practice or dental education. Medical-dental problems are involved in prevention, diagnosis and treatment of disease, education and research and a variety of

socio-economic issues. The professions possess much in common and demonstrate that there is unavoidable inter-relation of each discipline to the other. Realizing that there are areas of agreement, as well as conflict, how can the professions of medicine and dentistry institute better team work in the solution of common problems and concerns.

I have asked Dr. Bernard S. Snyder, a Fellow of the College, and Speaker of the House of Delegates of the American Dental Association, to introduce the members of the panel and to moderate the discussion.

Now to look again at Medical and Dental relations and see what progress has been made." Δ

## EDUCATION IN A PRIMARY CARE CENTER

It is believed that the West Virginia University Medical Center has the only integrated Dental/Medical Residency Program in existence. The Medical and Dental records are incorporated into one unit; the offices share a common waiting room and support space; and both programs share faculty.

The Medical Dental unit is referred to as the Family Practice Center at West Virginia University. The Medical Unit is composed of 6 M.D. faculty, 1 Ed.D. Nurse Educator, 1 Pharm.D., (clinical pharmacist) and 18 residents, six in each year of training. A support staff of 10 others complete the service and administrative staff.

The Dental Unit is composed of three D.D.S. faculty, a 4 member support staff and 4 D.D.S. residents. A clinical rotation in the Family Practice Center is also available to select Medical and Dental students.

The obvious goal of a service teaching center providing comprehensive health care is evident in

such an environment. Physicians have instant consultation regarding oral lesions. The dentist sees the patient immediately with the attending physician and appropriate treatment is initiated. Not only are patient needs met but the potential for teaching on a 1 to 1 basis is obvious. There is no other system of education where dentists can teach physicians oral health care more efficiently.

The dentist in turn has instant consultation regarding dental problems in compromised patients. Dental procedures on patients taking multiple drugs or having chronic diseases such as hypertension or diabetes are less risky when the dentist has medical backup. With more and more patients having open heart procedures, valve replacements and by-pass surgery, dentists encounter cardiovascular patients on a daily basis. Complications are minimized in such a center.

Polypharmacy is a concern to all health providers at every level.

In this setting the dentist has access to the clinical pharmacists who in turn evaluate the patient's drug regime. Potential drug interactions are minimized with such knowledge.

Such an arrangement offers two important factors for success. The first is a credible model for students and residents to emulate. The second is an efficient health care provider unit generating dollars used to maintain and operate an educational program.

Needless to say there is excitement when one sees such an operation in action. Combining Dental and Medical post graduate education in a Family Practice Center is efficient, cost effective and most important, a very sound educational endeavor for now and the future. Δ

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# PREDICTING STUDENT PERFORMANCE

## The Early Identification of Student Performance Skills in Operative Dentistry

Leopold H. Klausner\*  
 Richard E. Charlick\*\*  
 Thomas G. Green\*\*\*

Predictors of success in dental school continue to be of much interest to dental educators. Through the years, the correlation of pre-dental grade point average (GPA) and Dental Aptitude Test (DAT) scores versus performance in dental school has been thoroughly investigated.<sup>1-4</sup> Staat and Yancey, among others, have combined predictors, including GPA, DAT, and other measures, to yield a more complex admissions index.<sup>5</sup> More recently, one of the more serious problems facing dental educators is the declining number of applicants.<sup>6</sup> The traditional preadmission predictor, the pre-dental science grade point average (GPA) has begun to drop among dental school applicants.<sup>7</sup> Some investigators, including Suddick, Yancey, and Wilson, have sought alternative predictors of success, such as mirror-tracing and embedded figures.<sup>8</sup> These efforts have the potential to contribute to

the improved selection of applicants for admission to dental school. Once admitted, the student, the school, and society have a vested interest in the completed education and graduation of the dental school enrollee. The Division of Educational Measurements of the ADA recently published data for 1982/83 in which 562 students or 2.5 percent of the total dental school enrollment withdrew.<sup>9</sup> For the past five years about 60 percent of withdrawals have been for personal reasons and 40 percent for academic reasons. While those students who withdraw for personal reasons are of concern to dental educators, those withdrawing for academic reasons are of greater concern. It is very difficult to predict which students will leave for personal reasons, but it may be possible to predict early in their dental education which students will leave because of academic difficulty. Therefore, despite careful admissions procedures, these data indicate that there is a need to monitor student performance during dental school in order that appropriate efforts can be directed toward students early enough in their education so that later problems may be averted. Massler and Evans evaluated the correlation between the grades recorded in preclinical and clinical

dentistry.<sup>10</sup> Their results showed that 50 percent (222 of 445 students) received the identical grade in clinic that they received in preclinical work and that 48 percent changed by only one letter grade. The reported product moment correlation coefficient was  $r = 0.58$ . They stated in conclusion that grades received for preclinical performance in restorative dentistry are seldom predictive of the student's performance in clinic. This conclusion based on their data was challenged by Morse, who stated that "the conclusion simply does not fit the data."<sup>11</sup>

The purpose of this study was to reexamine the issue of the correlation between preclinical and clinical performance in operative dentistry by correlating introductory and final course grades.

### Methods

Data were collected from the recorded grades in preclinical and clinical operative dentistry courses for the graduating class of 1980 at The University of Michigan School of Dentistry.

The final course grade in the first preclinical course and the last clinical course in operative dentistry were examined using the Pearson product-moment correlation. These grades were of special

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interest since the first preclinical course is one of the earliest predictors and the last clinical course is the last measure of a student's ability in operative dentistry before graduation. The final grade in the preclinical course consisted of 1) didactic performance on two written examinations, 2) independent, end-product performance on two practical examinations, and 3) a series of faculty evaluations of daily performance skills.

The final course grade for the clinical experiences during the last semester of the senior year in operative dentistry consisted of a clinical examination and two faculty evaluations. None of the faculty assigned to the senior clinic had instructed in the freshman preclinical course.

### Results

The Pearson product-moment correlation coefficient between final grades earned in the freshman preclinical operative course and the last semester of senior clinical operative course was  $r=.59$  ( $p$  less than .01). The comparison of final grades in freshman preclinical and senior clinical operative dentistry is shown in Figure 1. Grades are shown with plusses and minuses with the difference between levels being equal to one

		Final Grade in Clinic									
		A	A-	B+	B	B-	C+	C	C-	D	E
Final Grade in Preclinic	A		1		2						
	A-	1		2							
	B+	4		2	8	3	1	1			
	B	2			12	5	3	4	2		
	B-		1	5	10	11	8	4	2		
	C+					6	5	6	2		
	C				3	2	1	9	5		
	C-										2

Figure 1. Comparison of Final Grades in Preclinical and Clinical Operative Dentistry

third of a grade. Grade changes between freshman preclinical and senior clinical operative dentistry for students who graduated with their class are shown in Table 1. Twenty nine percent of the students achieved exactly the same grade in the clinic as they did in the preclinical course. Sixty eight percent achieved a grade within one third of a grade level of their preclinical grade. Eighty five percent achieved a grade within two

thirds of a grade level and ninety six percent achieved a grade within one grade level of their preclinical grade.

Of the incoming 152 students, fourteen students did not graduate with their class. Six students who were not in academic difficulty withdrew permanently for personal reasons. Of these, five withdrew after freshman year and one withdrew after sophomore year. Two students withdrew after

freshman year for personal reasons but resumed their education and graduated in 1981. One student withdrew for personal reasons after sophomore year and resumed his education and graduated in 1982. Three students were not promoted with their class due to academic difficulty. After remedialization and removing grade deficiencies these students graduated in 1981. After remedialization two students were dismissed after having experienced academic difficulty during their freshman year.

### Discussion

There is a significant correlation demonstrated between grades established in preclinical and clinical operative dentistry in this study. These results are almost identical to those reported by Massler and Evans. It is suspected that this correlation would be higher if the range of grades examined was not so limited. The limited range is the result of the initial screening of students through admission procedures, the exclusion of non promoted students from the data,

and the reporting of grades in one third increments. The educational significance of these results is appreciated when it is recognized how little variance there is in students' performance and evaluation after four years of instruction and practice. Since the faculty assigned to the preclinical and clinical areas were not the same, no bias is suspected in the grading practices, however, as the same criteria were used in both areas, the reliability of the grading was enhanced. Since the grades are so consistent, they appear to be good empirical predictors, and students who are identified as having difficulty in preclinical operative dentistry should receive formalized supplemental instruction and continued reevaluation to enable them sufficient opportunity to improve their performance prior to their clinical operative dentistry experience. Students who are marginal or severely below standard in their preclinical performance should not be promoted without supplemental assistance, instruction, and reevaluation, because a student who has marginal performance skills will have tremendous difficulties with the rigors and demands of clinical operative dentistry. In addition, because of the inflexibility of most curriculums it is often more difficult to direct supplemental instruction to students during the clinical years of

**Table 1. Grade Changes Between Preclinical and Clinical Operative Dentistry**

Grade Change	Number of Students	Percent of Students
+1 $\frac{2}{3}$	0	0
+1 $\frac{1}{3}$	0	0
+1	6	4
+ $\frac{2}{3}$	11	8
+ $\frac{1}{3}$	18	13
0	39	29
- $\frac{1}{3}$	35	26
- $\frac{2}{3}$	12	9
-1	9	7
-1 $\frac{1}{3}$	3	2
-1 $\frac{2}{3}$	2	1

68%

85%

96%

instruction.

Nonpromoted students were not considered in the statistical analysis of this study because the remedialization that they received would have created a confounding variable. Of the 14 students who were not promoted, 9 withdrew because of personal reasons (6 permanently) and 5 withdrew due to academic difficulty (2 permanently). Personal reasons may include many factors such as illness, financial burdens, and personal tragedies, but motivation may be the foremost underlying factor in many instances of student disenrollment. Of the nonpromoted students who were in academic difficulty, none of the students demonstrated major problems in didactic performance, but rather in the areas of fine psychomotor, organizational, interpersonal, and self-evaluation skill development. While remedialization was successful in the majority of efforts, it was not 100 percent effective. Further analysis is important in this area to help identify additional characteristics and attributes that may be specific to nonpromoted students.

### Conclusions

1. There is a significant correlation between final grades achieved in preclinical and clinical operative dentistry in this study.

2. Virtually no students (less than 4 percent) differed more than one grade in their evaluation between preclinical and clinical operative dentistry.
3. Students that are likely to have problems in clinical operative dentistry can be identified in preclinical operative dentistry.
4. Assistance and instruction through remedialization can result in improved student performance, but it is not always successful.

### Acknowledgments

The authors wish to thank Dr. Donald S. Strachan for his assistance in the analysis of data related to this study.  $\Delta$

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## THE A.C.D. FOUNDATION REPORT

Last year, 274 Fellows of the College contributed to the American College of Dentists Foundation, Inc. The income from the capital funds has permitted the A.C.D. Foundation to distribute the booklet, "Dentistry—A Health Service", to over 15,000 dental students. Along with each booklet, the College supplied a page for an individual inscription of the students' name. The reduced sized photo copy shown here of the booklet's contents do not do justice to the one given to the students. The handsome covers are blue with the lettering and the College seal printed in gold. The booklets have been distributed as a coordinated effort of the school faculty and administration.

Another project of the A.C.D. Foundation will be reaching fruition during this year. This will be the completion of a publication to be entitled: *The Hillenbrand Era: Organized Dentistry's "Glanzperiode"*. This promises to be an invaluable addition to the dental literature describing the growth of the profession as viewed by the late Dr. Harold Hillenbrand, Executive Director Emeritus of the American Dental Association. Having been developed from numerous interviews, literature searches and historic consultations with Dr. Hillenbrand, the authors, Dr. Clifton O. Dummett and Lois Doyle Dummett of Los Angeles, California, promise an early Fall publication date. Dr. Hillenbrand was able to review the manuscript in early March prior to proceeding with the printing.

## DENTISTRY

### A HEALTH SERVICE

#### A Guide to Professional



#### Conduct

Prepared by

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## DEDICATION

The American College of Dentists dedicates this book to you, who have selected a career in dentistry as your life's work. Your choice of a career in dentistry implies and indicates a desire to join with others within the profession in our common goal of providing for improving the health of the public which we serve and for the advancement of the art and science of dentistry. We welcome you into this service.

Your active participation in the numerous challenges of the future is important and as a professional person it becomes part of your task to promote the standards of the profession for the welfare of mankind.

The purpose of this book is to summarize the incumbent responsibilities and obligations that are associated with such dedicated service and give support to the highest ideals of the profession and in its service to humanity.

4

## RIGHTS AND PRIVILEGES OF THE DENTAL PROFESSION

The right of a dentist to professional status rests in the knowledge, skill and experience with which one serves patients and society. Dentists have the obligation of keeping knowledge and skill freshened by continuing education throughout their professional life.

Dentists have a right to win those things which give them and their families the ability to take their proper place in the community, but service to the public must be put first.

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

Every profession receives from society the right to regulate itself, to determine and judge its own members. Such regulation is achieved largely through the influence of the professional dental societies in each state, and every dentist has the dual obligation of becoming a part of a professional society and of observing its rules and ethics.

(From the Principles of Ethics of the American Dental Association)

8

## ETHICAL STANDARDS

Ethics is the inherent personal honesty in daily living. The measure of its quality should not fluctuate, but should be steadfast and lasting.

Professional ethics and standards founded on that basic principle are the result of many years of evolution in the field of public and professional relations. Compliance with the principles of ethics is a moral obligation of all dentists. The recognized Code of Ethics is intended to aid dentists individually and collectively in maintaining a high level of professional conduct. The Code is not a law but a standard by which a dentist may determine the propriety of all conduct in one's relationship with patients, with colleagues, with members of allied professions and with the public.

## INTERPERSONAL RELATIONS

Interpersonal relations for the profession is basically the result of human relations practiced by the individual dentists. The sum total of such efforts will produce good or poor relations and public appreciation or criticism. Every dentist is charged with the responsibility to develop the best possible human relations in his or her contact with the public. Each individual dentist must be aware that one's actions reflect not only on oneself and one's practice but equally as much on the profession as a whole.

9

## THE DENTAL PROFESSION

The practice of dentistry first achieved the stature of a profession in the United States where, through the heritage bestowed by the efforts of many generations of dentists, it acquired the three unfailing characteristics of a profession: education beyond the usual level, the primary duty of service to the public and the right to self government. This is your heritage. Guard it well!

G.V. Black once said: "Every professional person has no right to be other than a continuous student." It is the only way in which you can keep abreast and serve your patients as they have a right to expect.

You have had and will have the benefit of the contributions made to the profession by many persons. You owe it to the profession to add your bit to this knowledge so that the public and the profession will benefit the more from the contributions you, too, have made.

Your entrance into the profession of dentistry signifies your desire to devote yourself to a lifetime of health service.

5

## DENTISTRY AS A HEALTH SERVICE

Dentistry as a profession is relatively young, although its services were recognized even in ancient times.

Dentistry is that specialty area of the health sciences devoted to the care and treatment of the oral and maxillofacial complex.

Through its educational system and consistent efforts to provide the highest type of professional service, dentistry now holds an enviable position among the health professions. Advancement from the role of purely simple ministrations to dental ills, to that of a complete dental health service has added stature to its position and made dentistry a truly learned profession.

Your interest, enthusiasm, obligations and responsibilities for this health service are paramount, because it is only through your efforts that professional advancement will continue. What you do is important. Your service is a dedicated one and needs your constant vigilance.

Service above self is the essence of every health profession. Its foremost obligation and privilege is to relieve humanity of its suffering and to extend the health of the patients which we serve through their lives.

Of the professional person, Albert Schweitzer writes: "He belongs no more to himself alone; he has become the brother of all who suffer." Such dedication distinguishes between the professional person who thinks of service first and the tradesman whose primary interest is a financial one.

You as a dentist are a dedicated person—dedicated to serve humanity in relieving its ills, teaching the principles of good health and joining with other professions in the mastering of mutual health problems.

You must have a human interest in the person who comes to you for professional services and that interest should be all encompassing for the welfare of such persons. Dedication to service and human relations must be on the broad basis of true concern

for one's fellows. It cannot be on a commodity basis.

6

## THE PROFESSIONAL PERSON AND CITIZENSHIP

The professional person—the dentist—has a dual responsibility to the community in which he or she chooses to practice.

The dentist must give the community the best service of which he or she is capable. This is one of the cardinal principles of a health service. "Good enough" is not good enough. It must be the "best" service under the circumstances.

The dentist, as a well-trained and educated citizen, also has the obligation to aid the community with its general problems and should be willing to donate some time for their solution. Interest and leadership in community affairs is an obligation that should not be overlooked.

There is perhaps a third area of responsibility which is really a part of the first—an obligation as a public servant in health matters. This has to do with discussion, advising, guiding and aiding in the general health problems of the community, especially as they relate to oral health.

This of course, should be done without attracting undue attention to oneself and in accordance with the rules established by the dental organizations of the community.

One way the dentist can and should show concern for society is to be a member of the local dental society. In this manner, the dentist can join with colleagues in developing and facilitating dental programs for the benefit of the public at large.

All of these responsibilities, properly executed, give the dentist an opportunity for a valuable public service in the community.

7

## LICENSURE

The Dental Practice Acts of the various States and Territories regulate the practice of dentistry. The dental profession, through its state dental societies, exercised the right to have these "acts" introduced and placed into the legal framework of the individual states. The main purpose was the protection of the public.

One "Act" states that "The practice of dentistry is hereby declared to affect the public health and safety and to be subject to regulations and control in the public interest. It is further declared to be a matter of public interest and concern that the dental profession merit and receive the confidence of the public and that only qualified dentists be permitted to practice dentistry."

In the adoption of these "Acts" a privilege to practice has been granted the profession and that privilege should be protected. Only so long as a high standard of professional conduct and practice is maintained can we expect to retain that privilege.

In the granting of a license, a responsibility is placed on the holder which demands that he or she comply with all the provisions of the Dental Practice Act. Correct conduct, contribution to professional science, dignified public relations and concern for the reputation of the profession should be the watchwords of every dentist's life.

## THE CHALLENGE

In the foregoing pages an effort has been made to point out the privileges and responsibilities that are yours as you enter the dental profession. These privileges and responsibilities should be approached with a recognition of the opportunities that are offered in dental health service.

A challenge faces you in this rapidly changing world that cannot be avoided but which gives you the opportunity of aiding in the fulfillment of mankind's dream to make life richer and fuller.

Education and research improves the road that we must travel and our goal, in the ultimate reaches of a challenging world, is the eradication of dental disease and the improvement of life for those who look to us for care. There are no limits to what can be done: You and you alone determine what your limits shall be.

11

## AMERICAN COLLEGE OF DENTISTS

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

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

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

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

(d) To encourage, stimulate and promote research;

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

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

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

(h) To make visible to the professional person the extent of his or her responsibilities to the community as well as to the field of health service and to urge acceptance of them;

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

To all these purposes and objectives, the College has steadfastly devoted its efforts and by doing so has created greater opportunities in the profession itself, and has also elevated dentistry in the eyes of other professions and the public.

12

# CELEBRATING A CENTENNIAL: A RETROSPECTIVE VIEW

Clifton O. Dummett\*

In the life of any institution, existence for 100 years is a cherished accomplishment because it represents a successful weathering of the tribulations and triumphs which the institution must have endured during that period. 1986 is the Centennial year of the School of Dentistry of Meharry Medical College and its celebration permits a retrospective view of some particular events in the moment of its history that characterized substantial progress made by the dental school.

Originated specifically to train Afro-Americans to provide health services to a segment of the population victimized by racial segregation and discrimination, Meharry Medical College, Nashville, Tenn., through its schools of medicine, dentistry and allied health services, has accumulated a creditable record in its dedication to these efforts.

Continuous advancements in the health sciences have greatly affected medical and dental education, requiring professional institutions to update their curricula in order to keep pace with new scientific discoveries, improved treatment modalities, technological advances in equipment and materials, and current educational practices. Meharry's School of Medicine was the first unit of the College to initiate major steps to adjust its programs to the accelerating tempo

of change. Designated to begin this task was the prominent and experienced physician Dr. Edward Lewis Turner.

At the invitation of Dr. John J. Mullowney, Meharry's second president, Turner first came to Meharry in 1936 as professor and head of the department of Medicine.<sup>1,2</sup> His efficiency in reorganizing the department and his excellence in teaching internal medicine won the respect and devotion of both students and colleagues, and facilitated his succession to the deanship of the medical school and then the presidency of Meharry in 1938, following the retirement of Dr. Mullowney who had served in that capacity since 1921.<sup>3</sup>

Dr. Turner immediately set in motion plans to upgrade dentistry in a process similar to that employed in the School of Medicine. At the time, Dr. Donley Harold Turpin, 1918 dental alumnus of Meharry, had been serving as dental clinic supervisor, an appointment made by President Mullowney in 1921.<sup>4</sup> President Turner effected the name change from the Dental Department to the School of Dentistry and appointed Dr. Turpin to the position of Acting Dean in 1938.<sup>5</sup>

Dr. Turner retained his responsibilities for medical education and Dr. Michael J. Bent, Meharry alumnus, class of 1921, served as assistant dean of the medical school. Limited financial support had always plagued the dental department. New sources of subsidy were not forthcoming prob-

ably because of a combination of factors, not the least of which was dentistry's relatively unappreciated position in the health professional hierarchy.

By 1941, President Turner had himself taken over supervision of dentistry, and was prepared to recommend to Meharry's Board of Trustees that the dental school be closed. However, early in 1942 he made an urgent appeal to the W.K. Kellogg Foundation for funds to reorganize the dental school. That request was granted thereby providing the uninterrupted continuity of the institution. The Kellogg contribution enabled Turner to recruit Dr. Marion Don Clawson to head the dental school.<sup>6,7</sup> Turner and Clawson had been professional colleagues in the late Thirties in Beirut, where they both served as Directors of Medical and Dental Education respectively, at the American University of Beirut, Syria (since World War II, the A.U.B., Lebanon). Clawson joined Meharry as Director of Dental Education,<sup>7</sup> a title designation created by Clawson with the approval of Dr. Turner, Meharry's third president.

Upon the appointment of Dr. Clawson in 1942, Dr. Turpin relinquished all administrative responsibilities as Acting Dean and was named Professor of Prosthetic Dentistry and Dental Consultant of Hubbard Hospital. Turpin was much beloved by his colleagues, students, and alumni who held him in high esteem for his longtime association with and contributions

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to his alma mater.<sup>7</sup>

M. Don Clawson was born in Clay City, Ill., in 1900, the only son of Shaba (Bissey) and Ellis Henry Clawson.<sup>8,9</sup> He obtained his early education in Clay City, and following graduation from Harter-Stanford Township High School, he enlisted as a hospital apprentice in the U.S. Navy in 1920. He was discharged as a pharmacist's mate second class in 1922.

Clawson completed his predental requirements at St. Louis University, his dental education at Washington University School of Dentistry, class of 1926, and practiced general dentistry on a full-time basis from 1926-28, in Bonne Terre, Missouri. He moved to St. Louis in 1928 and practiced there for a year before traveling to England where he completed a dental survey. Continuing his experiences outside of the United States, he spent 1930 to 1941 in the Middle East where he served in many capacities including demonstrator and lecturer at the University of St. Joseph in Beirut; director of dental services at the Iraq Petroleum Company, Kirkuk, Iraq; professor of operative dentistry, hospital staff member, and director of dental education, all at the American University of Beirut. He was also a visiting clinician at Syrian University in Damascus.

A charming, friendly, and sensitive man, widely traveled and fluent in several languages, Clawson became well known and his credentials were most impressive, including post-graduate studies at leading American and European universities. Clawson served with the Office of Strategic Services (OSS)

from 1941 to October 1945 and was cited for his services by General Donovan. For his contributions to the Manhattan Project for Atomic Research, Clawson received a citation from Secretary of War Henry I. Stimson.<sup>8,10</sup>

It was upon his return to the United States in 1942 that he was approached by President Turner and agreed to become involved with reorganizing Meharry's dental school as director of dental education. Clawson's background in education, experience, and professional contacts proved invaluable in the reorganization of Meharry's dental school.

In 1942 a short time after establishing residence in Nashville, Clawson recruited Dr. Clifton O. Dummett who was completing graduate studies in periodontics at Northwestern University Dental School in Chicago.<sup>6</sup> On July 1, 1942, Dummett joined the faculty to establish a department of periodontics and oral pathology and organize the teaching of endodontics at Meharry. He was promoted to assistant professor in 1943.

Early that year, the school was visited by the Council of Dental Education of the American Dental Association as a part of its national accreditation program. The Council had established its guiding principles and criteria for accrediting the nation's dental schools in 1939, and in December 1940 the Council published "Requirements for Approval of Dental Schools."<sup>11</sup> Visitations to the nation's dental schools were carried out between October 1942 and June 1943.

Early in 1944, Dr. Clawson was

requested to assume responsibility for organizing and directing dental health services at the Oak Ridge Tennessee Reservation of the Manhattan Project for Atomic Research.<sup>10</sup> Colonel Stafford Warren, director of the entire health program of the Manhattan Project had decided to invite organized dentistry to become involved with the Oak Ridge dental health program. At a highly secret conference, Captain C. Raymond Wells, president of the American Dental Association and Dr. Oren A. Oliver, chairman of Procurement and Assignment of the Fourth Service Command, selected Dr. Clawson because of his wide experiences and his knowledge of the strict security measures which governed every activity of the Manhattan Project. With the cooperation of President Turner of Meharry, Colonel Warren was able to arrange for Clawson's six months leave of absence for full time duty at the Oak Ridge Reservation.

President Turner appointed Dr. Dummett to act as Deputy Director of Dental Education with direct responsibilities to the President "for the general supervision of the activities of the dental school including supervision of clinic and classroom activities, curriculum management, student and staff problems."<sup>12,13</sup>

The school continued its five-year improvement program supported by funds obtained from the W.K. Kellogg Foundation, Battle Creek, Michigan. The program called for the acquisition of well-qualified teachers and sought to procure them by sending a few talented Meharry graduates to

leading dental centers for postgraduate study and inviting them to join the faculty upon completion of their studies. A few exceptional older faculty were detailed for short refresher courses. The resident salaried faculty were all Afro-Americans, and they were supplemented by visiting faculty, all leading Caucasian dentists from Nashville who volunteered their services. Their classes were audited by resident faculty, and both visiting and resident faculty cooperated in offering postgraduate courses to in-and out-of-state minority dentists.

At the end of 1944, President Turner announced his intention to resign from the presidency in order to return to his first love—medical teaching.<sup>14,15</sup> On December 31, he closed out one of the most esteemed and progressive administrations in the history of Meharry. Under his guidance the College had become one of the foremost institutions of health professional education for minority students.

On January 1, 1945, the Board of Trustees in unprecedented action elected M. Don Clawson to be the fourth president of Meharry Medical College.<sup>16,17</sup> He was the first dentist to serve as Meharry's president, and it was the first time in the nation that a dentist had been named president of a medical school. One of President Clawson's first major decisions was to seek out and appoint a top administrative officer for the School of Medicine.

Since 1938 when President Turner had appointed Dr. Michael J. Bent assistant dean of the medical school, together they had super-

vised the activities of the school. Because Clawson felt an inability to serve with Bent in a similar relationship, he soon created the position Director of Medical Education and appointed Dr. Murray C. Brown, a Caucasian physician, to the post.<sup>18</sup> In the director of medical education was vested the responsibilities for external administration of the School of Medicine. Dr. Bent retained the title of Dean and was responsible for internal administration of the medical school. Director Brown was given also the academic rank of professor of medicine.

When Clawson first joined the Meharry administration, the School of Nursing was administered by Hulda M. Little, B.S., R.N.,<sup>19</sup> a Meharry graduate and popular figure with the school's alumnae. She was the first Afro-American dean of nursing at Meharry and in the United States. After 30 years at the school, Dean Little retired in 1943. President Turner appointed as her successor, Rebecca Janney Timbers Clark, B.S., R.N., M.S., a Caucasian nursing administrator.<sup>20</sup> Turner adopted the Clawson designation and appointed Mrs. Clark the Director of Nursing Education instead of Dean.

In 1945 Mrs. Clark resigned the directorship. She had made a significant contribution in establishing Meharry's unit of the U.S. Nurse Cadet Corps as a part of the World War II preparedness effort. It became Clawson's responsibility to appoint her successor, and he chose Alma E. Gault, Ph.B., R.N., as Director of Nursing Education.<sup>21</sup> Miss Gault soon recruited and appointed Eunice Mattis, A.B., R.N.,

M.A., as Acting Dean, School of Nursing, with the academic rank of instructor of pharmacology and basic sciences.

When Clawson became president he retained the title of Director of Dental Education thereby ratifying the pattern of a two-tiered administrative level: Caucasian directors above Afro-American deans. Clawson assigned the affairs of the School of Dentistry to Dr. Dummett who eschewed the title of Dean and instead created the administrative title, Chairman, Dental Administrative Committee and Director of Clinics.<sup>22,23</sup> His academic rank was professor of periodontics and oral medicine.

In March 1945 the Council on Dental Education of the American Dental Association fully approved and accredited Meharry's School of Dentistry. It represented a first-time achievement by a school for minority dental students and a fitting tribute to the reorganization programs instituted just three years previously. In the list of the nation's accredited dental schools published in the April 1945 issue of *The Journal of Dental Education*,<sup>24</sup> 24 of the 38 schools were fully approved, and 12 received provisional approval.

Conditions at the College continued to prosper and in the ensuing months, Meharry's dental school added a class in dental technology. Eighteen students, male and female, were enrolled. This innovation made Meharry one of the first in the nation to inaugurate such a training program.<sup>25</sup> In addition, the Department of Dental Hygiene, discontinued in the early 1940s, was reopened with six

women enrolled. The course was of two years duration.

A novel program was instituted to extend the services of the school's dental clinics to the surrounding community. Oral examinations of elementary school children were accomplished at their schools by junior and senior dental students. The examinations were used as a basis for bringing children to Meharry's pedodontics clinic for the correction of oral disorders.

One of the nation's first in-service educational programs for the dental faculty was inaugurated at Meharry.<sup>26</sup> Designed to help dental teachers keep abreast of the changing philosophies of education and the newer methods of instruction, the program contracted with the Department of Education of Fisk University in developing a lecture series to review and revise instructional methods and procedures.

A dental research program was initiated with the first clinical studies on physiologic and pathologic oral pigmentation. The February 1945 issue of the *Journal of Dental Research*<sup>27</sup> published results of observations on oral pigment variations in Afro-Americans.

Instituted also was an outreach effort to inform and recruit young people for careers in dentistry and dental auxiliaries. Two brochures were prepared, directed especially to females, entitled "Dentistry as a Career for Women," and "An Opportunity for You." The latter emphasized the role and importance of the dental auxiliaries.

During the first year of Clawson's presidency, numerous honors and



Nashville Tennessee Fellows of the International College of Dentists congratulate Meharry President Don Clawson upon his winning the 1945 Pierre Fauchard Gold Medal, and his presidency of the USA Section I.C.D. From left to right, Roy Elam, George Seeman, President Clawson, James J. Vaughn, Guy M. Zuccarello, Oren A. Oliver.

accolades were accorded him by local and national dental and professional organizations (Figure 1). Among the most significant were his election to the presidency of the USA Section of the International College of Dentists and the award of the Pierre Fauchard Gold Medal. Appointment to the Boards of Trustees of Fisk University and Meharry Medical College were additional distinctions conferred upon him. All of these acclamations reflected favorably upon dentistry nationally, and specifically on the School of Dentistry.

The eventual establishment of a chapter of dentistry's national scholastic honor society at Meharry's dental school was a significant accomplishment in breaching the impediments of segregation. In June 1943, Dummett initiated by letter to his former teacher at

Northwestern, Dr. George W. Teuscher, secretary-treasurer of Omicron Kappa Upsilon, a request for information about forming a Meharry chapter since there were a number of excellent students who deserved the opportunity to compete for that honor. Upon Dummett's receipt of the requested information, the machinery was set in motion to comply with all necessary requirements.

One year later in June 1944, the Supreme Chapter sent notification that the petition to establish a component chapter had been denied. The reasons for the denial were not stated, but were revealed in the March 1944 annual address<sup>28</sup> of Dr. Robert E. Blackwell, president of OKU's Supreme Chapter, and professor and chairman of operative dentistry at Northwestern University Dental School. An ex-

cerpt from Dr. Blackwell's address read:

"During the year an incident occurred which has served to raise the question as to what kind of organization we really are—whether we are an honor society or a social fraternity or both. The incident referred to was the application of Meharry Medical College School of Dentistry for a charter.

"So far as I know this is the first application for a charter by the faculty of a school for Negro dental students. Upon receipt of the application your secretary sent ballots to the subordinate chapters, as required by our by-laws. At the expiration of 30 days, the constitutional limit, 14 affirmative votes to 4 negative had been received—an insufficient number of votes to decide the question.

"The important point is not the number of ballots cast but rather the reasons for the negative votes. Letters accompanying the ballots indicated that some of the negative votes were cast because Meharry College is a school for colored students and because social complications would arise, which might be embarrassing in some quarters if a charter were granted.

"It should not be necessary to remind you that gentlemanly conduct, scholarship, character, industry, ability, even genius, are not confined to the white race. We have no such monopoly. Suppose George Washington Carver had been a dentist! In some of our schools we have had colored students of the highest scholastic attainments and they have competed for honors and won them

without question. I personally know of several colored men who wear the key of Omicron Kappa Upsilon with credit to themselves and to our Society. Why a school should be denied a charter for the single reason that its students are Negroes is beyond my comprehension. I think there is only one question to be considered in this case: Is the standing of Meharry College sufficiently high to justify a charter in that institution. In my judgment it is. Perhaps a few years ago it was not, but the same might be said of some other schools.

"For those who are seriously concerned about the possible social complications let me say that, according to our constitution, the active members of our Society are those and only those who are faculty members in schools where chapters exist. Alumni members and honorary members have no vote or any legal connection with the active chapters.

"Finally, may I say that at this critical time in the world's history when men are fighting to keep some semblance of democracy alive, we should use our influence, little though it may be, to preserve and to extend that democracy. By recognizing ability and achievement among men and among schools regardless of color or creed, we are doing something to further that objective."

Dr. Dummett initiated a formal protest of the denial to the national secretary, and at the latter's suggestion submitted a second petition in November 1944, referring to the report by the Council on Dental Education listing Meharry's School of Dentistry among those institu-

tions fully approved. In October 1945 word was received that favorable action had been taken on the petition for membership and the chapter would be known as Omicron Omicron.<sup>29</sup> This marked the first occasion a school for Afro-American dental students had been awarded a chapter in dentistry's national honor society, enhancing the stature of Meharry's dental school among its peers.<sup>30</sup>

In July 1946, President Clawson approved an educational leave of absence for Dummett to accept a Rosenwald Fellowship in Public Health at the University of Michigan.<sup>31</sup> Dr. Dummett resumed his duties at Meharry in 1947 and was named Dean of the School of Dentistry, making him at age 28, the youngest dental dean of the nation.<sup>32,33</sup>

During the 1947-48 school year two major situations occurred to affect the college's administrative relationships, one specifically in the dental school, and the other with ramifications for the future of Meharry. Both, however, were the consequences of entrenched custom and practice enforced by *de jure* and *de facto* segregation.

The titular designations of "Director of Dental Education" and "Dean" were inherently ambiguous in the perceived responsibilities vested in each, and they created confusions in the school's internal and external relationships. At the end of his first year as dean, Dummett declined to continue with this dichotomy.<sup>34</sup> President Clawson promptly relinquished the title Director of Dental Education, and Dummett was named Dean and Director of Dental Educa-

tion.<sup>35,36</sup> This was the first and only appointment of an Afro-American to the Director post at Meharry, representing a gainful rupture in the administrative system.

Meharry's administrators had always been under financial restraints and President Clawson inherited the perennial problem of meeting fiscal budgetary needs. The pressing urgency to find a lasting solution to the College's precarious financing propelled Clawson into a situation that underscored the high cost of America's "peculiar institution"—separate but equal.

Clawson recognized that support by foundations and other philanthropic organizations such as Carnegie, Kellogg, and Rockefeller, would become increasingly limited requiring private educational institutions to plan and seek other sources of revenue. He was an astute observer of American society in general and the South in particular. Although he was not in sympathy with the philosophy of segregation, his approach to dealing with the problems facing his stewardship of Meharry was based on pragmatism: The code "separate but equal" was a southern luxury in particular and therefore the cost should be borne at the source—within state tax revenues. Several court decisions had concluded that it was the responsibility of the states to provide financial support for the education of all their citizens. These pronouncements stemming from legal skirmishes involving segregation in education gave impetus to Clawson's decision regarding the involvement of Meharry Medical College in the

Southern Regional Plan proposed by the governors of southern states.

In October 1947 the Conference of Southern Governors convened in Asheville, N.C., and agreed that one of their purposes was to provide "either within the several states or without, adequate facilities for higher education for both whites and Negroes."<sup>37</sup> This action was taken in order to provide a collective solution to the dilemma posed by court decisions. Collective responsibility would make it possible for states to combine their resources according to availability while at the same time fulfilling the mandated responsibility for educational opportunities for Afro-Americans residing in their states without dismantling "separate but equal." The first step toward achieving this goal was the formation of the Regional Council for Education composed of the governors of the southern states and other representatives.

The Council established a Commission on Human Medicine, Dentistry, Pharmacy, and Nursing to provide the basis for making recommendations to the state legislatures concerning the possibilities of joint interstate support for facilities needed in these fields.<sup>38</sup> Meharry was officially represented on the Commission by Murray Brown for the School of Medicine and by Dummett for the School of Dentistry.

President Clawson proposed Meharry Medical College as the regional school to serve the minority populations of the southern states. Reactions to the proposal were swiftly manifested as Meharry

was caught up in the national discussions about the philosophy of regionalization, an emotional issue which produced strong supporters and opponents. Believing that he would be derelict in carrying out his duties as president if he did not allow Meharry to take advantage of the Regional Plan concept, Clawson was unprepared for the unfavorable national press coverage Meharry received. His motives stemmed not from a desire to maintain the racial status quo but rather to protect and assure the future growth and well-being of an institution whose potential he never doubted.

Offering the College as the regional institution for training Afro-American professional students was a proposal not unanimously supported by the College's administrators.<sup>39,40</sup> As a member of the Regional Council for Education's Commission on Human Medicine, Dr. Dummett had consistently rejected 'segregated' regional planning, so that when Meharry's participation in the plan became official, he resigned as dean and director of dental education effective June 30, 1949.<sup>41</sup>

In succeeding months the national controversy on regionalization continued to swirl, and Clawson came to believe that his continued association with Meharry had developed into a liability for the institution. He resigned the presidency in June 1950 and returned to the private practice of dentistry in Oak Ridge, Tenn., in 1951.

It was Clawson's plan for the future, the international situation permitting, to reopen the dental

school in Beirut. It had ceased operations on account of World War II. His sudden, untimely death in Oak Ridge, Tenn. on December 17, 1951, at the early age of 51, ended these hopes.<sup>42</sup>

The passage of time facilitates a balanced appreciation of the significant contributions Clawson made to Meharry in general, and specifically to the dental school which experienced its golden years from 1942 to 1949. In retrospect, it is apparent that efforts to upgrade the faculty, curricula, and students in order to meet national accreditation standards foretold the end of onerous vestiges of traditional paternalism. Out of the healthy, vigorous debate on the issue of regional education came the full realization of an emerging new climate among the American people inhospitable to the impoverished credo of separate but equal, thus paving the way toward integrated education. The eventual assumption by Afro-Americans of the leadership roles in the affairs of the College indicates the validity of the push for competence and excellence—hallmarks of the efforts and hopes of M. Don Clawson, D.D.S., fourth president of Meharry Medical College. Δ

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# OPINION

## CHARITY CAN HELP YOUR PRACTICE

One evening seven years ago, a young executive made a presentation to the board of directors of my local dental association. He asked for donations to help in a project which he had become personally and emotionally involved. Tears filled his eyes as he recounted the death of his young daughter from leukemia. The entire board sat somber as he recounted the number of trips to and from the University Hospital in Gainesville, Florida for chemotherapy. The family was torn apart trying to find affordable housing to stay near their daughter while the chemotherapy was accomplished. When impossible to stay in Gainesville, there was always the long drive home and then up early the next morning to return to their daughter's bedside. The father's project was known as Ronald McDonald House, a place for a family to stay with their children while the unpleasant chemotherapy took place. It was to be a home atmosphere, void of the sterile unfriendly hospital atmosphere. Unfortunately the dental association was unable to use dues money for such a cause.

The next day I wrote a personal check and began to think of some way to help more. It was that same day that a wife of a close physician friend came to me for

treatment. Normally I would have treated her for no fee or greatly reduced fee but this time I said, "Normally I would charge you nothing, but my normal fee is 'X', and I would like you to consider making a donation in that amount to the Ronald McDonald House in Gainesville". After I told her about the project, she made out a check to Ronald McDonald House for twice my fee. After that, I essentially stopped professional discounts.

Ronald McDonald House is built now and providing the environment for which it was intended. The young man who lost his daughter, tapped the resources of the community, countless people and organizations. With McDonald Corporation's help and expertise, his dream became reality. I feel proud to have helped in a small way, but I gave very little of my own money.

Since the opening of Ronald McDonald House, I have carried on the same policy, but the donations are directed to other causes, mainly my dental school. I know of no present dental school that cannot utilize additional funds to better their programs or help students with the tremendous burden of educational costs.

In the process I have been helped. For years I found it diffi-

cult to charge a fee for a consultation. I knew I was entitled to compensation for my knowledge, training, and experience, but I still felt guilty charging for an opinion. Many patients also objected to a charge for "doing nothing". No more now it's "you owe me nothing, but I would like you to make a charitable, tax deductible donation to the institute that enabled me to have the ability to answer your questions".

The guilt feeling is gone, but more importantly, there has been a side effect that I never considered. The Madison Avenue people call it P.R.. Just recently a patient came to me with a chronic, long-standing problem causing very little pain. I explained the treatment necessary to correct the problem and, as is customary, I left the decision as to if and when the treatment would be accomplished, totally up to the patient. The patient's comment to me was, "My neighbor came to you, and you didn't charge her. She only made a small donation to some school. It's obvious to me that you are not just out for the money. If you say I need treatment, let's get started".

It's a nice way to practice dentistry, and it helps everybody involved. Why not consider a similar policy in your office?

Anonymous by request. Δ

# A TREASURY OF DENTISTRY

Gardner P.H. Foley

## AN IRISH TRAGEDY

One of my favorite areas of dental research is *geographical dentistry*—referring to the quality and quantity of dentistry characteristic of a certain locality, especially in reference to its practice of dentistry in relation to the practice of dentistry in other places. It is a fascinating subject and leads the researcher to an amazing variation of dental standards throughout the world. I have written often about dental practice in many geographical divisions, usually those in the lowest scale of comparative wealth and knowledge. In the present causerie I shall present evidence that a country with the supposed advantage of having available to it the best factors of good dental practice provides for its people a ghastly inferior standard of dental care.

Recently I read *Up in the Park* (Atheneum, 1983), the diary of Elizabeth Shannon, the wife of the American Ambassador to Ireland 1977-1981. A woman of wit and intelligence Mrs. Shannon traveled throughout that wonderful country, meeting all kinds of its people and keenly observing all phases of the national life. Her impressions of the oral conditions of the Irish populace reveal a tragically neglectful disposition toward the importance of dental care. These passages from her diary will shock the American dentist, especially

the references to political opinion on the subject of dentistry.

July 31, 1978—Took the (three) boys to their dentist in Stillorgen. He did his postgraduate work in the United States and takes good care of the boys' teeth. One day, and soon I hope, the Irish will take care of their teeth more seriously. "When Irish Eyes Are Smiling" is a beautiful song, but more often than not, an Irish smile is a disaster area of vacant lots, nooks and crannies, black holes and brown craters that were never intended for public display. The minister for health in Ireland once told Bill (her husband) that he thought Americans were "obsessed" with the care of their teeth. Oh, that the obsession would pass to our Irish friends.

May 23, 1979—The Dental Health Foundation had just announced that Ireland is in the throes of an epidemic of tooth decay! "Forty percent of unskilled and semi-skilled workers over 16 have no natural teeth! Thirty percent of professional and managerial workers have gum disease! Not more than 10 percent of the population under 25 have full sets of uppers and lowers!"

Mrs. Shannon's observations expressed to prominent Irish officials

undoubtedly had received a degree of respect that influenced the thinking of persons responsible for the adoption of measures leading to the establishment of effective oral care programs. Americans, especially dental and medical missionaries, have contributed greatly to the improvement of dental services in many of the world's backward nations.

## BRENDAN BEHAN

In his widely syndicated column (June 1, 1970) Norton Mockridge recounted an interesting dental anecdote about Brendan Behan, the Irish writer who was better known for his imbibition of hard liquor than for his good literary productions. Albert Hague, the composer, and Burl Ives, the actor and writer, were conversing with Behan at a rare period of his life when he was consistently sober. He had been informed by a physician of the soon fatal result if he did not cease his drinking. This medical admonishment scared Behan into parting from his malignant habit—for a while. Ives asked Behan how it felt to be sober after twenty years. "Well," said Behan "I found out that for all those years I'd had a toothache."

## SIN

For many centuries a passage from the Bible was the source of a popularly accepted cause of dental and medical ills. Not only the victims but also the practitioners of dentistry and medicine believed that *sin* is the cause of sickness. A victim of the toothache, for example, received no sympathy for his trouble and was viewed as one who deserved his pain because he had surely sinned against the Word of God. The vitally influential passage is in *Ecclesiastes* (2,26): For God giveth to a man that is good in his sight wisdom, and knowledge, and joy; but to the sinner he giveth travail.

## JUVENILE DENTAL EXPERIENCES

Recollections of childhood and adolescent visits to the dentist, oral hygiene practices of the family, and the parental views on dental care constitute an interesting part of the lay literature illustrating patient reactions to the various phases of dental practice. Among the rare reports of this nature are two written by adult autobiographers of the British Isles.

In her *A Childhood in Scotland* (1952) Christian Miller recalls the

turn of the century visits of the children of her well-to-do family to the county town for periodic dental checks.

We children were dragged, sick with fear, to the dentist; the water in the locality was very soft, and though my mother tried to add extra lime to our diet we often had holes in our teeth. Dentists, in those days, hurt; and we were not even allowed to mention this to the dentist, the strain of pretending to be brave added to that of enduring the pain.

*Greenhorn* (1973), by Anne Tibble, is a record of her memories of a childhood in the North Riding of Yorkshire, where her father was a coachman on a large estate. Of special dental interest is the folklore poem that I had not seen before.

A visit to the dentist, before buses, a day's travel, was an expensive twelve miles. I didn't go to the dentist until I was eighteen. When our second teeth ached, but could not be pulled out, we sat by the fire, wrapped in the brown shawl, and held a bag of hot bran to our cheeks.

We girls could only jostle our loose and aching (primary) teeth touchily and bear them in triumphant relief to Mother when at last they were out.

She praised us, told us to put the tooth carefully into the flame of the fire. Then she taught us:

Fire, fire, burn a bone;  
God send me another tooth  
again:  
A straight one,  
A white one,  
And in the same place again.

## Reader Replies

Dear Dr. Foley

I read your article about "Dental Truants" in the Spring 1986 issue of the *Journal* with great interest. I would like to make a couple of corrections and make some additions to your article.

Bud Houser graduated from the University of Southern California (USC) not the University of California at Los Angeles (UCLA). We at USC are very proud of his accomplishments.

The golfer who attained fame in reaching the finals of the U. S. Amateur Tournament was Frank M. Taylor, Sr., now of Palm Springs, California, not William Taylor as stated in your article.

A name that could be added to your list is Dallas Long, a USC graduate who won the shot-put in the Olympics. Also Neil Kohlase, Marvin "Ace" Burns, Fred Tisue, and Lance Larson, all USC dental graduates who represented the United States in swimming and Olympic Water Polo games.

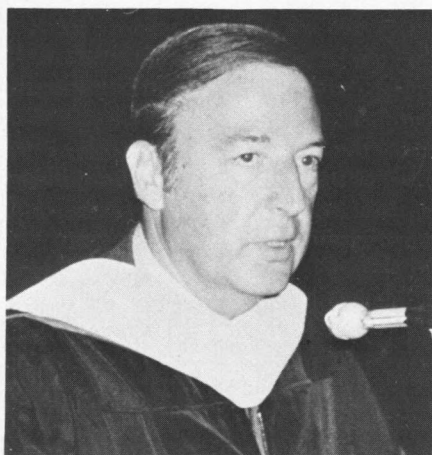
I hope that this will be of interest.

Robert Thompson  
Torrance, California

# NEWS OF FELLOWS

**Chris Philip** of New York City has been elected president of the Northeastern Society of Orthodontists, a constituent of the American Association of Orthodontists. Dr. Philip is an Associate Professor and Clinical Coordinator of the Department of Orthodontics at Fairleigh Dickinson University School of Dentistry.

**D. Walter Cohen**, Philadelphia, has been elected the 18th president of the Medical College of Pennsylvania (MCP). Dr. Cohen is the dean emeritus of the School of Dental Medicine at the University of Pennsylvania. He is a well-known researcher and practitioner in periodontics.



D. Walter Cohen, D.D.S.

**Ralph V. McKinney, Jr.** of Augusta, Georgia has been chosen administrator of the year by the Georgia Association of Educational Office Personnel. Dr. McKinney is professor and chairman of oral pathology at the Medical College of Georgia. He is also the 1986-87 president of Omicron Kappa Upsilon.

**Gerald Orner** of Philadelphia has developed an Explorers Post Program to teach career opportunities in dentistry to high-school age boys and girls. The continuing program offers eight weekly two-hour lectures at the Temple University School of Dental Medicine where Dr. Orner is Chairman and Professor of the Department of Community Dentistry.

**Russell I. Todd** of Richmond, Kentucky has received the Kentucky Dental Association Distinguished Service Award, the association's highest award, for his many contributions to the profession. He has previously been honored by the Pierre Fauchard Academy and the American Association of Dental Examiners.

**Manuel I. Weisman**, Augusta, Georgia has been elected to the board of directors of the American Association of Endodontists. Dr.



Russell I. Todd, D.D.S.

Weisman is a clinical professor of endodontics at the Medical College of Georgia.

**Rowland A. Hutchinson** has been appointed Associate Dean for Academic Affairs at the University of Detroit School of Dentistry, where he was previously Chairman of the Department of Oral Medicine/Periodontics.

**Fali S. Mehta** of Bombay, India has been elected as President of the Dental Council of India, New Delhi. A graduate of Tufts University School of Dental Medicine, he is a past president of the Indian Dental Association. Dr. Mehta is in private practice and is currently



Rowland Hutchinson, D.D.S.

Head of Basic Dental Research for the Tata Institute of Fundamental Research.

**Ralph R. Lopez** of Santa Fe, New Mexico has been honored by the New Mexico Dental Association for 50 years of service to

dentistry and to his state of New Mexico.

The Southern Maryland Dental Society presented awards for Outstanding and Meritorious Service to **George S. August**, **N. William Ditzler** and **Joe N. Price**. The awards were to recognize the



Fali S. Mehta, D.D.S.

contributions of these dentists to the profession, to education and to the public good over an extended period of time.

**Donald M. Hagy** of Sacramento has been elected as a Director on seven-member American Board of Oral and Maxillofacial Surgery whose main purpose is to conduct examinations for certification to qualified oral and maxillofacial surgeons. Dr. Hagy is in private practice in Sacramento.

**John L. Bomba** of Philadelphia and Immediate Past President of the American Dental Association, was presented with a plaque from the American College of Dentists in recognition of his outstanding efforts on behalf of ethics and professionalism while he was ADA President. The plaque was presented by ACD President-Elect H. Curtis Hester on the occasion of the 100th Anniversary Celebration of the Philadelphia County Dental Society.

## SECTION ACTIVITIES

### Carolinas

The Carolinas Section met at Mid Pines Resort, Southern Pines, N.C. Regent James A. Harrell, Sr. and ACD Executive Director Gordon H. Rovelstad were in attendance at the two-day meeting.

Two business sessions, a scientific meeting and a banquet honoring new members highlighted the annual Section meeting.

At the Annual Convention of the South Carolina Dental Association there was a joint luncheon held with the International College of Dentists with Carolinas Section Secretary-Treasurer Harold W. Higgins presiding.

The American College of Dentists Student Leadership Award was presented to senior dental student Charles R. Bumgardner from the Medical University of South Carolina. The awardee is the nephew of Carolinas Section Immediate Past Chairman John Bumgardner.



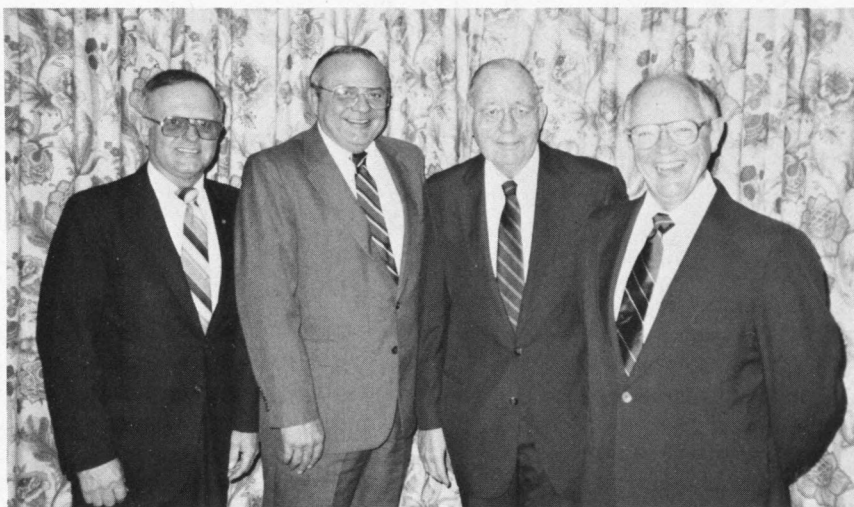
Pictured at the Carolinas Section meeting are, left to right, Gordon H. Rovelstad, ACD Executive Director, outgoing Section Secretary-Treasurer Howard W. Higgins, new Secretary-Treasurer Robert M. Wilkinson, Vice Chairman William Mynatt and Section Chairman John O. Bumgardner.

### New Arkansas Section Receives Charter

The Arkansas Section received its charter at Little Rock, Arkansas on April 12. The Charter was presented to the first Section President, Taylor D. Buntin, Jr. by Regent Robert E. Lamb.

C. W. Nickels was elected Vice-President and Lester Sitzes, Jr. was named Secretary-Treasurer.

American College of Dentists Treasurer, Robert C. Coker, assisted in the charter presentation.

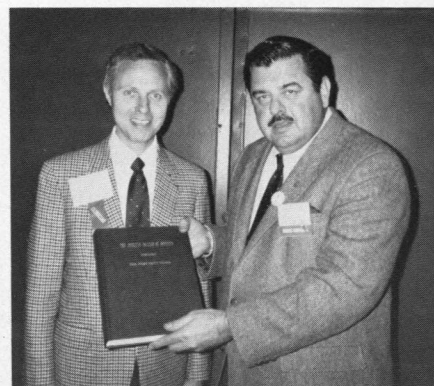


Pictured are dignitaries at the new Arkansas Section charter presentation ceremonies. Left to right are Lester Sitzes, Jr., Section Secretary-Treasurer; ACD Treasurer Robert C. Coker; Regent Robert E. Lamb and Section President Taylor E. Buntin, Jr.

## Southern California



The Southern California Section *Achievement Award* for Senior Dental students from Southern California dental schools is presented to students "who have shown great potential for future contribution and service to the dental profession and to the public the profession serves." Section Chairman Richard B. Hancock, left, presents plaques to the 1986 Achievement Award winners Gary S. Solnit from the University of Southern California, Russell D. Nishimura from UCLA and Bruce L. Taber from Loma Linda University. Accepting for Bruce Taber was Dr. Robert Kinzer, right, Chairman of Restorative Dentistry at Loma Linda. The Awards were presented at the Annual ACD-ICD Meeting held in conjunction with the Annual Session of the California Dental Association at Anaheim.



Dr. Gordon Christensen (left) of Provo, Utah was named "Man of the Year" by the Colorado Section. Dr. Christensen presented a lecture to the Colorado Section entitled "Professionalism—1986." He was presented with a copy of the History of the American College of Dentists by the Immediate Past Section Chairman, Roy H. Reger, right.

## Florida

Gordon H. Rovelstad, left, Executive Director of the American College of Dentists, accepts a contribution for the ACD Foundation from Florida Section Chairman H. Raymond Klein.

## Section Representatives to Meet

Section Representatives of the 39 Sections of the American College of Dentists will be meeting on Friday afternoon, October 17, in Miami Beach at the Sheraton Bal Harbour Hotel. The subject for this year's program will be Ethics and Professionalism. The opening session for the Section Representatives will begin at 2:00 p.m.

Upon the completion of the formal presentations and discussions, each of the Regents will meet with the representatives from the Sections in their Regency.

At the end of the afternoon, beginning at 5:00, there will be a

reception for all participants. This reception will be hosted by the President of the College. All of

those who are attending the Section Representatives meeting are invited.

## STATEMENT OF OWNERSHIP AND CIRCULATION

THE JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS is published quarterly by the American College of Dentists, Suite 352N, 7315 Wisconsin Avenue, Bethesda, Maryland 20814. Editor: Keith P. Blair, D.D.S., Managing Editor: Gordon H. Rovelstad, D.D.S.

The American College of Dentists is a non-profit organization with no capital stock and no known bondholders, mortgages or other security holders. The average number of readers of each issue produced during the past 12 months was 4681; none sold through dealers and carriers, street vendors or counter sales; 4405 copies distributed through mail subscriptions; 4405 total paid circulation; 276 distributed as complimentary copies. For the Summer, 1985 issue the actual number of copies printed was 4650; none sold through dealers, etc.; 4245 distributed through mail subscriptions; 4245 total paid circulation, 277 distributed as complimentary copies; 4522 copies distributed in total. Statement filed with the U.S. Postal Service, September 30, 1985.

# JOURNAL OF THE AMERICAN COLLEGE OF DENTISTS INSTRUCTIONS FOR CONTRIBUTORS

## INTRODUCTION

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

## EDITORIAL POLICY

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

## PREPARATION OF MANUSCRIPTS

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

## THE INDEX

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

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

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

Authors should submit two copies of the manuscript and two original sets of illustrations to: Dr. Keith P. Blair, Editor, Suite 352N, 7315 Wisconsin Ave., Bethesda, MD 20814-3304.

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

## REFERENCES

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

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

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

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

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