The **DOUR REAL AND A COLLEGE OF DENTISTS**



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

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

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

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

(d) To encourage, stimulate and promote research;

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

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

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

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

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



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University Responsibility In Dental Education

Most early dental education was provided in dental schools that were small, privately owned, forprofit trade schools that had a one to two year curriculum to graduate the dentists of that time. A few dental schools were associated with universities and their curriculum was very similar to that of the private schools. The faculties were usually made up of dentists who practiced in the area and taught part time, assisting the few administrators of the school in training the students.

In 1926, the illustrious William John Gies authored the famous Carnegie Commission Report which established that dental schools should be associated with universities. He urged dental schools to adopt missions, such as research, that would allow dental schools to function as a part of the university environment. Through his efforts, most dental schools were gradually incorporated into universities, as time went on. However, the majority of faculty members continued to be practicing dentists who taught part time and had only their DDS degree.

By the 1960's, this same faculty system had changed very little in some schools. The great majority of faculty remained primarily clinicians and dental schools were mostly occupied with teaching, to produce dentists educated to be good practitioners.

Unfortunately, neither this technical dental school curriculum, the clinician-teacher faculty, nor the production of dentists had fit into the picture envisioned by academic purists who believed that all higher education had the basic mission to perform research. They insisted that the type of training given to dental students did not really require a university setting. Furthermore, dental faculties that were not qualified to do research were there-



tore not qualified for university teaching and had not established their right to a place in the academic community. As a result of this philosophy, dental schools and their faculties had generally not been integrated into the university systems over this period from the 1930's to the 1960's.

Responding to directives by universities in recent years to participate in research, dental schools are currently making great strides in developing research capabilities. Dental school faculties are now being accepted as qualified members of the academic community and the dentist who has only a DDS degree cannot obtain an academic appointment at most schools.

At some universities, however, dental schools have been placed in the uncomfortable position of feeling like unwanted stepchildren. With most dental schools currently having financial problems, due to declining enrollment, some parent universities are demanding financial solutions from the schools, which many of the universities expect to be self supporting. Dental schools are frequently forced to do



their own fund-raising. Even those universities that are heavily endowed rarely allow endowment funds to trickle down to the dental schools. In some cases, the university administrations have reacted negatively by quickly closing the schools, as was the case at Oral Roberts, Emory and Georgetown Universities.

One important question which arises is that of whose responsibility it is to educate and provide dentists for our country. It would seem that the universities which assumed that responsibility by originally establishing their dental schools, or which transferred private dental schools to university status, should have and should continue to maintain that responsibility. The three universities that closed their schools apparently felt no such responsibility.

It is hoped that university administrations will work together with their dental schools to solve some of these problems, to provide better funding methods for schools and to accept responsibility for their university to continue to educate dentists.

These are not new problems. They are just more noticeable at this time because of the large, recent decline in dental student enrollment. Nevertheless, it would seem that responsible and caring professionals can work together to resolve these dental education problems.

Responsibility is an essential requirement in education. \triangle

Keith P. Blair, DDS

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CHEMICAL

Guidelines for the Treatment of Recovering Chemically Dependent Dental Patients

Dennis R. Miers* Doyle P. Smith**

Chemical Dependence— The Disease

Chemical dependency is a psycho-social biogenetic disease¹ and is accepted as such by the American Medical Association and the American Dental Association.² It is classified as a disease because it 1) has a recognizable group of signs and symptoms. 2) It follows a predictable and progressive course; if untreated may result in death. 3) It produces consistent anatomic and or physiologic alterations. 4) Its cause or causes may not yet be known. 5) It is a primary condition, not merely a symptom.³

The late William D. Silkworth, M.D.,⁴ a pioneer in the treatment of chemical dependency, made the following statements, concerning alcoholics, to the founders of Alcoholics Anonymous (A.A.). "Then there are types entirely normal in every respect except in the effect alcohol has upon them. They are often able, intelligent, friendly people. All these and many others, have one symptom in common: they Dental patients who are recovering from a dependence on mood altering chemicals will require a treatment regimen which varies from one followed in treating the nonchemically dependent patient. This article presents a description of the disease of chemical dependency, a profile of the recovering person, recommendations certain and contraindications for drug therapy, and a protocol to follow when mood altering drugs are necessary in the dental treatment of the recovering chemically dependent patient.

cannot start drinking without developing the phenomenon of craving. This phenomenon, as we have suggested, may be the manifestation of an allergy which differentiates these people, and sets them apart as a distinct entity. It has never been, by any treatment with which we are familiar, permanently eradicated. The only relief we have to suggest is entire abstinence."

Robert G. Niven, M.D.,⁵ Director of the National Institute on Alcoholism Abuse and Alcoholism states that "thanks to a wise national policy that regards alcoholism not as a moral degeneracy but as researchable, treatable, and preventable disease, that fund of basic knowledge has grown. As a result, it has become abundantly evident, in just the past few years, that genetically based biological predisposition is an important contributing factor in the development of alcoholism. We now know that both heredity and environment are involved in the making of most alcoholics."

The majority of research concerning chemical dependency has been centered around alcohol. Ethanol is a sedative hypnotic drug and it is a well accepted fact among those who treat chemical dependency that cross-tolerance and cross-dependence exists between mood altering chemicals.6 For example, diazepam can halt the withdrawal syndrome of alcohol. The alcoholic will probably require more diazepam for sedation than will the non-alcoholic patient given the same body weight, age, etc. Substitution of one mood altering chemical for another may only perpetuate the disease process. In the case of the recovering patient a mood altering drug may reactivate the disease process and result in a relapse.7

The treatment for chemical dependency is much the same regardless of which drugs were used by the patient. First, the chemically dependent person should be assessed by professionals and detoxified in a medical or social detox *Continued on Page 6*

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DEPENDENCY

There are 18,000 Dentists Who Need Our Special Attention (Part I)

S. William Oberg*

America's third most serious health problem, following cancer and heart disease, is alcohol/drug or, chemical dependency. It is defined as the continued use and abuse of alcohol and/or drugs despite repeated adverse consequences to self and others.

Chemical dependency is a primary disease with many similarities to diabetes. Most Americans consume sugar safely and enjoyably, but diabetics cannot. In the same way, 70 percent of Americans use alcohol and/or drugs, but approximately 10–15 percent become dependent with continued use.¹

The chemically dependent American is male, female, young, old, black, white, laborer, housewife, executive and health professional, including *dentist*.

How prevalent is chemical dependency among dentists? In the absence of research data we do not know. The presumption is that dentists are no *less* at risk than the general population to become addicted to alcohol and/or drugs. The title of this article is derived from the data found in Table One. According to the American Dental Association masterfile of dentists, as of December 1, 1988 there were 180,282 dentists in the United States. Based on a *minimum* at-risk percentage of 10%, 18,028 dentists Chemical Dependency is a serious health problem in America, affecting all strata of society, including dentists. This article, part one of two, examines chemical dependency in the dental profession—its prevalence, new research findings, the disease's impact on the dental family and what steps the profession has taken in recent years to address the problem.

were and are at risk to become chemically dependent at some time in their lives. Some treatment professionals think that because of dentists' accessibility to drugs through prescribing capabilities and other factors unique to dentists as health professionals, they may even be at *greater* risk to become chemically dependent. Some help committee volunteers estimate that less than 10% of those at risk are accessing help.

Research in the Eighties

Chemical dependency is a chronic, progressive and relapsing illness which, if not treated successfully, is fatal. It follows a characteristic and predictable clinical course, producing consistent anatomic and functional changes in

multi-organ systems (including skin, gastrointestinal, cardiac, pulmonary, central nervous and musculo-skeletal). It has specific clinical diagnostic features including, denial, dishonesty, minimization and rationalization, which protect the individual from recognizing the reality of the illness. The disease of alcoholism, in particular, has undergone intense scientific scrutiny in recent years. It is now becoming very clear that differences in susceptibility to alcoholism and alcohol abuse exist, not for "moral" reasons, but for genetic ones. An impressive amount of evidence gathered over the last 10 years indicates that susceptibility to alcoholism can not only be genetically transmitted, but that genetic factors (in addition to familial environmental factors) are involved in a large proportion of alcoholism cases, and probably in the majority of them.2

This new knowledge is likely to have a profound social impact in the coming years. No longer will we think of chemically dependent persons as possessing "weak character" or "no will power". No longer will they be perceived as "bad or inferior people." Knowing that alcoholism is heritable should make it easier for us to rethink our cultural attitudes toward alcoholism and other drug dependencies and to accept them for what they are —diseases with a molecular basis, *Continued on Page 9*

^{*}S. William Oberg, B.D., Assistant Secretary, Council on Dental Practice, American Dental Association.

Continued from Page 4

program depending on the anticipated severity of the withdrawal.8 Withdrawal can be life threatening and distressful. When drugs are cleared from the patients system, a process to break their denial is initiated. Denial can be defined as the patient's refusal or inability to see the consequences of their drug use. They must accept the fact that they can no longer successfully use mood altering chemicals. Participation in Alcoholics Anonymous Anonymous (A.A.), Narcotics (N.A.), or Cocaine Anonymous (C.A.) is the prescription of choice by almost all successful treatment programs.²

Chemical dependency is not limited by ethnic, socio-economic, intellectual, or educational status. It affects every level of society and is related to the exposure of a genetically predisposed individual to the chemical. This should not be confused with the person who abuses drugs but seemingly can stop using them when they want to. Abusers may or may not pass into the disease process of addiction. Data indicates that only one of five abusers will become addicted.1 Approximately 10-20% of the population is predisposed to the disease of chemical dependency. An individual cannot be diagnosed accurately as having a predisposition to chemical dependency, however, investigators are developing diagnostic criteria which may one day detect a latent chemically dependent person.5

Profile of a Recovering Person

A recovering person will have usually resumed an average lifestyle except for the fact that they will probably attend support groups such as A.A, N.A., C.A., and abstain from the use of mood altering chemicals. They will usually present to the dental office as an average patient but may be hesitant to identify their disease history because of societies negative perception of chemical dependency. As health care professionals we must consider the physical and psychological state of the patient before treating their dental disease. The question, "are you recovering from the disease of chemical dependency," should appear on our health information forms. If presented in this manner the person is more likely to identify their condition as they will see that the dentist has some understanding of their disease. It should be stated on the form that the response will be held confidential. If the patient denies a history of chemical dependency, then the dentist has fulfilled his responsibility. The dentist should not be held accountable for any relapse of the disease of chemical dependency which may occur due to use of drugs which would normally be well tolerated in otherwise healthy individuals. Most recovering patients, not in a state of denial about their disease, will inform health care personnel about their chemical dependency. They realize that the inadvertent prescribing of mood altering chemicals could be catastrophic. If these patients are treated with dignity and good dental care they could become a referral source for their recovering associates.

Dentists who are particularly aware of the disease of chemical dependency may want to contact treatment centers in their area. There are over 4,000 treatment centers in the U.S.9 Often these hospitals will have chemically dependent patients undergoing inpatient therapy and while there, these patients may require emergency dental treatment. It may benefit the hospital to have a dentist, knowledgable in recovery dentistry, on the staff as a consultant when dental emergencies arise. If it becomes necessary for a patient to visit the dental office he will usually be accompanied by someone on the staff of the hospital. Treatment should be confined to those problems which require immediate attention. The patient should not be removed from their recovery setting any longer than necessary. Any elective dental treatment should be deferred until the patient has been discharged from the hospital. The dentist should consult the patient's primary physician to be aware of any specific recommendations or contraindications. If possible have the hospital fill and dispense any necessary medications. Nitrous oxide or other forms of sedation are contraindicated unless permission is granted by the primary physician.

The dentist should treat the recovering patient as if they were allergic to mood altering chemicals just as he would avoid giving penicillin to someone who is sensitized to it. Chemical dependency may not be an allergy in the conventional sense but these people are sensitized to mood altering chemicals.

Chronic use of alcohol and other psychoactive drugs can have deleterious effects on the oral tissues, teeth, and supporting structures of the teeth. Chronic use of alcohol may be a contributing factor in oral cancer and periodontal disease.^{10,11} Most other psychoactive drugs can cause xerostomia which is often an etiological factor in dental caries and periodontal disease.¹²

Poor self image, lack of motivation, and depression are usually sequela of chemical dependency.¹³ These factors may have contributed to a history of poor oral hygiene and lack of professional dental care. Prevention and home care should be emphasized to arrest current disease processes and to prevent future ones.

An additional factor which may influence dental treatment planning is the patients financial condition. Many people with chemical dependency are in a distressed financial state due to their inability to keep jobs and also due to the staggering cost of maintaining drug and alcohol abuse. The dentist may have to offer an alternative treatment plan along with an extended payment schedule. This may help to reduce the patient's stress and allow them to complete treatment more easily.

Pain Control

Pain has physiological and psychological components. Pharmacology is employed to handle the physiological component by blockade of the neuronal pathway, in the case of local anesthetic, to centrally or peripherally reducing perception of pain with analgesics. The psychological component is handled by increasing the patients faith and confidence in the practitioner and the means he employs to reduce the pain. With the chemically dependent patient the dentist should avoid or minimize the use of centrally acting drugs (Table 1) and capitalize on those medications which block noxious stimuli locally eg. local anesthetics, or peripherally in the case of the non-opioid analgesics eq. aspirin, ibuprofen. diflunisal, acetaminophen etc. An excellent review article, by Troul-los, E.S. et. al.,14 discusses various

research which shows that many of the non-steroidal anti-inflammatory drugs (NSAID's) are equal or superior to many of the narcotic analgesics normally used in dentistry. For mild pain, aspirin 650-1000 mg, acetaminophen 600-1000 mg. or ibuprofen 200 mg. are excellent analgesics. It should be noted that even though acetaminophen has excellent analgesic properties it has little anti-inflammatory effect. For moderate pain, ibuprofen 400-600 mg. can be used. It has been shown to be equal or superior to acetaminophen 600 mg. plus codeine 60 mg.15 Diflunisal 500-1000 mg. has been shown to have excellent analgesic anti-inflammatory qualities and the added benefit of 8-12 hour action. It has analgesic efficacy comparable to acetaminophen 600 mg. plus codeine 60 mg.16 Ibuprofen or diflunisal should cover most dental pain including 3rd molar extractions.14

When dental postoperative pain is expected, Dionne R.A. et. al.,¹⁷ have demonstrated excellent pain suppression by employing a nonsteroidal anti-inflammatory drug such as flurbiprofen and a long acting local anesthetic such as etidocaine. Their research indicates

Table 1. Drugs which may be hazardous to the sobriety of a recovering chemically dependent person

- A. Narcotic (opioids) such as codeine, morphine, hydromorphone, meperidine, oxycodone, hydrocodone, pentazocine, propoxyphene, nalbuphine hydrochloride, butorphanol tartrate.
- B. All sedatives including the barbiturates and synthetic sedative drugs such as chloral hydrate, glutethimide, and ethchlorvynol. Any medication which contains alcohol such as cough syrups or cold medications.
- C. All minor and major tranquilizers.
- D. All antihistamines with the possible exception of terfenadine which reportedly does not cross the blood brain barrier.
- E. Decongestants such as phenylpropanolamine, and pseudoephedrine.
- F. Antidepressants such as amitriptyline HCI, and imipramine HCI.
- G. Central nervous system stimulants such as the amphetamine type drugs.
 H. Anesthetic gases including nitrous oxide.

Note: This list is not exhaustive and is meant only to be a guide.

that when NSAID's are given 30 minutes preoperatively and 3 hours postoperatively combined with a long acting anesthetic, pain is suppressed to a greater extent, compared to when oxycodone 10 mg. plus 650 mg. acetaminophen are given 30 minutes before surgery. 2% lidocaine with 1:100.000 epinephrine five minutes before surgery and a second dose of the oxycodone-acetaminophen combination three hours after surgery. Most patients preferred the former drug therapy and there was no apparent increase in side effects.

Iatrogenic pain can be minimized by following some basic principles. Being gentle to tissues. especially bone, during surgical procedures may reduce postoperative pain and swelling. When removing bone or tooth structure with rotary instruments the use of an irrigant will reduce thermal trauma to those tissues. Traumatic occlusion can cause pain and should be minimized when new restorations are placed or when an endodontic procedure is initiated. Cold compresses, in the case of traumatic injury, may reduce swelling and postoperative pain while heat therapy can obtund pain the day after surgery or when infection of the tissues is involved. Some practitioners successfully employ acupuncture, transcutaneous electrical nerve stimulation (T.E.N.S.) ultrasound therapy, biofeedback. hypnosis or corticosteroid therapy to reduce pain and or control anxiety. In the case of chronic pain of the head and neck region which cannot be ameliorated by conventional means, the recovering patient should be referred to a chronic pain treatment center which will help them learn how to cope with the pain.

Sedation

If possible, the use of central nervous system depressants, including nitrous oxide, should be avoided. Nitrous oxide has been shown to have abuse potential and could initiate drug seeking behavior or drug ideation.^{18–20} Due to cross tolerance and cross dependence the recovering patient should not be exposed to mood altering chemicals even though these chemicals may not have been their original drug of choice. Nitrous oxide, benzodiazepines, barbiturates, etc. could trigger the desire to return to the original drug of choice.⁷

Guidelines for the Use of Mood Altering Drugs

Mood altering drugs are not contraindicated when the recovering patient is experiencing severe pain or when operative procedures necessitate the use of sedation or anesthesia. However a protocol should be followed if these drugs are required.

- Inform the patient and a family member of the type of drug being used and its possible side effects.
- Consult the patients primary physician and/or after-care personnel of your treatment plan and intended drug therapy.
- 3. If a prescription is indicated a family member, A.A. or N.A. sponsor should fill and dispense the drug. (A sponsor is someone in the program of A.A. or N.A. in whom the recovering person can confide. They usually have a greater length of sobriety then the person whom they sponsor.)
- Suggest that the patient intensify their activity in A.A., N.A., or other group therapy that may be associated with their after-care program.
- Prescribe only the amount of drug necessary to cover their acute pain and do not give refills.
- 6. Reassure your patient that

you will do everything possible to make them comfortable.

 If mood altering drugs are required the primary physician may recommend that drug therapy and subsequent detoxification occur within the hospital environment.

Summary

If left untreated chemical dependency is a fatal disease.3 Those people who are recovering from this disease must continually work on their physical, emotional, and spiritual well-being. We should bear in mind that even though there are many who have walked miles in this new way of life, there will be those who are just learning to walk. They may be fragile and require more attention than the others. Recovering persons are responsible for their own recovery, but we should be careful that through ignorance on our or the patients part, that we do not participate in an iatrogenic relapse of the disease condition. Δ

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Table 1. Dentists at risk for alcoholism and other drug dependencies

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Jurisdiction	Dentists On File ¹	Number At Risk
Alabama	1,796	180
Alaska	326	33
Arizona	1,991	199
Arkansas	1,068	107
California	21,058	2,106
Colorado	2,588	259
Connecticut	2,915	292
Delaware	313	31
Florida	6,905	691
Georgia	3,131	313
Hawaii	910	91
Idaho	604	60
Illinois	8,350	835
Indiana	2,954	295
lowa	1,784	178
Kansas	1,461	
Kentucky	2,186	146
Louisiana	2,180	219
Maine		218
Maryland	662	66
Massachusetts	3,417	342
Michigan	4,908	491
Minnesota	6,644	664
	3,350	335
Mississippi	1,052	105
Missouri	3,049	305
Montana	565	57
Nebraska	1,161	116
Nevada	528	53
New Hampshire	692	69
New Jersey	6,267	627
New Mexico	733	73
New York	17,069	1,707
North Carolina	2,948	295
North Dakota	367	37
Ohio	6,602	660
Oklahoma	1,657	166
Oregon	2,242	224
Pennsylvania	8,656	866
Rhode Island	666	67
South Carolina	1,500	150
South Dakota	363	36
Tennessee	2,855	286
Гехаз	8,562	856
Jtah	1,242	124
/ermont	361	
/irginia	3,441	36
Washington		344
Vest Virginia	3,508	351
Visconsin	931	93
Vyoming	3,547	355
	287	28
District of Columbia	911	91
Puerto Rico	1,256	126
Dther ³	15,761	1,576
OTAL	180,282	18,028+

¹Source: Market Share Report, ADA Department of Membership, 12/1/88. ²Percentage (10%) from Bissell & Haberman, *Alcoholism in the Professions*, p. 22.

³Other: Fed. Dent. Serv.; V.I.; Panama Canal; Public HIth Serv.; Civil Serv.; V.A.; unorganized; direct members; grad students; provisional; unknown addresses.

Data distributed by ADA Council on Dental Practice and its Advisory Committee on Chemical Dependency Issues (12/1/88) whose victims are worthy of our compassion.

The Profession's Response

In 1979 the American Dental Association (ADA) adopted Resolution 21H authorizing its Council on Dental Practice (CDP) to act as a clearinghouse and national source of information with regard to chemical dependency programs for the dental profession.³ A 1980 survey conducted by the Council revealed that 18 constituent dental societies, 6 component dental societies and 1 dental school had programs in place to help chemically dependent dentists/dental students.

At the American Medical Association's Sixth National Conference on the Impaired Physician, held in Seacaucus, New Jersey in 1984, an ADA representative reported that 28 constituent societies, 19 local societies and 6 dental schools then had help programs in operation. As of December 31, 1988 there were 45 state programs and 47 local programs in existence.

In 1984 the ADA House of Delegates adopted two significant resolutions.⁴ Resolution 89H directed the Council on Dental Practice to form a national committee, subsequently titled the Advisory Committee on Chemical Dependency Issues (ACCDI), with responsibilities to be a clearinghouse of information on chemical dependency help programs for dentists, to develop educational information on intervention and to provide consultation and support to state and local dental societies as they develop chemical dependency help programs.

Resolution 50H directed that the CDP conduct a one-day national workshop on alcohol and chemical dependency in the dental profession and, based on interest and need, consider conducting such national meetings annually. The First National Conference on Chemical Dependency in the Dental Profession was held at ADA headquarters on July 24, 1985. Second and Third National Conferences were conducted in 1987 and 1988.

The 1986 ADA House of Delegates adopted the following "ADA Policy Statement on Chemical Dependency" as Resolution 64H:⁵

- The ADA recognizes that chemical dependency is a disease entity that affects all of society;
- 2. The ADA is committed to assist the chemically dependent member of the dental family toward recovery from the disease by education, information and referral. The establishment of constituent and component society chemical dependency programs is essential to this effort;
- 3. The ADA encourages those institutions responsible for

dental education to allocate adequate curriculum on substance use, misuse and addiction;

- 4. In meeting the needs of the public and the profession, the ADA also encourages ongoing liaison between constituent society chemical dependency committees and their state boards of registration;
- The ADA recognizes the need for research in the area of chemical dependency in dentistry.

Impact on the Dental Family

Chemical Dependency is accurately labeled a "family disease" because of the impact a dependent individual can have on members of the immediate family, co-workers, friends and professional colleagues. Dentistry labels chemical dependency as a "dental family disease" because of the close interrelationship between the various members of the dental family-dentists, colleagues, in practice and professional organizations (like the American College of Dentists); also spouses and other family members, office staff, dental suppliers, dental school personnel, etc. Each member of that dental family can contribute to an addict's continuing dependence or to helping the addict enter the world of treatment and ongoing recovery. Those contrasting contributions will be ex-

Table 2.	Chemica	I Dependency	"Hotline/Help'	' Numbers
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Alabama	(205) 933-8032 [a.m.] 594-5597 [p.m., wkend]
Alaska	(907) 273-3190
Arizona	(602) 253-7039
Arkansas	(501) 568-2589
California	(415) 756-7787 [North]; (213) 383-2691 [South]
Colorado Connecticut	(303) 534-0214
Connecticut	(203) 278-5520 or 649-5514 [a.m.]
Deleurere	649-9431 [p.m.]
Delaware	(302) 239-7414
Florida	(904)277-8004 [24-hr]; 800-888-8776 [wkdays]
Georgia	(404) 261-8121
Hawaii*	(808) 536-7234 [Volunteer info, referral)
	836-2230 [Drug Addict. Services of Hawaii]
1.4.4.4	946-1438 [Alcoholics Anonymous]
Idaho*	(208) 344-7888 [Med Socity] 343-7543 [Dent Soc
Illinois	(800) 327-6994 [in-state only]
Indiana	(317)634-2610 [Ask for Mike Quinn]
lowa	(515) 243-2793
Kansas	(913)827-2722 [a.m.] 825-0635 [p.m.]
Kentucky	(502) 459-5414
Louisiana	(504) 455-7508
Maine	(207) 767-3301/2 or 774-7829 [a.m.]
	767-2884 [p.m.]
Maryland	(301) 964-2275
Massachusetts	(617) 528-9488
Michigan	(517) 372-0303
Minnesota	(612) 641-0730
Mississippi	(601) 982-0442
Missouri	(314) 636-2344
Montana	(406) 443-2061
Nebraska	(402) 463-2471 [a.m.] 463-2072 [p.m.]
Nevada	(702) 786-6155 or 825-6788
New Hampshire	(603) 669-3131 [a.m.] 662-0784 [p.m.]
New Jersey	(201) 932-4965
New Mexico*	(505) 266-7868 [Med Society] 345-9135 [Dent Soc
New York	(800) 255-2100 [in-state only]
North Carolina	(919) 832-1222
North Dakota	(701) 477-3707
Ohio	(800) 282-1526 [in-state only]
Oklahoma	(405) 482-4873
Dregon	(503) 241-9154
Pennsylvania	(800) 692-7256 [in-state only]
Rhode Island	(401) 433-1800
South Carolina	(803)765-1726
South Dakota	(605) 665-2981 or 665-7303
Tennessee	(615) 356-8004
Texas	(713) 792-4804
Jtah	(800) 662-6500 [in-state only] or
	(801)281-5315 or 355-7477
/ermont*	(802) 223-7898 [Med Society] 864-0115 [Dent Soc
lirginia	(800) 552-3886 [in-state only]
Vashington	(800)552-7236 [in-state only]
Vest Virginia	(304) 744-4883
Visconsin	(800) 242-9976 [in-state only] or (414) 276-4520
Vyoming	(307)587-5588 [a.m.] 587-9876 [p.m.]
).C.*	(202) 222-2230 [Med Society] 686-0817 [Dent Soc]
uerto Rico	(809)752-4070
.D.A.	(800)621-8099 [U.S., Puerto Rico, Virgin Isl.]
	(800) 621-3291 [Hawaii, Alaska]
	(800) 572-8309 [Illinois only]
	extension 2622, ask for Bill Oberg

* Society does not have current help program 9/88 Compiled by the ADA Council on Dental Practice

amined in the second part of this article.

The tripartite membership structure of organized dentistry also can contribute either to "the conspiracy of silence and denial of the disease" or to a working together to ensure that addicted colleagues can be helped into recovery with every assurance of anonymity and confidentiality.

Significant fiscal support needs to be given to chemical dependency help programs from all levels of organized dentistry—support that can amount to thousands of dollars, annually. Such programs are not "just another cause to be heard." They are bona fide lifesaving ventures.

Educate, Educate, Educate

With significant input from the ADA Councils on Dental Education and Dental Practice and the American Student Dental Association (ASDA), the Pharmacology and Therapeutics Section of the American Association of Dental Schools (AADS) has appointed a committee to develop curricular guidelines in chemical dependence for submission to the Section and the AADS House of Delegates in 1989.

The Auxiliary to the American Dental Association (AADA) and the American Student Dental Association (ASDA) Houses of Delegates adopted resolutions in 1987 and 1986, respectively, recognizing

chemical dependency as a disease and committing themselves to helping their addicted members to find treatment and recovery. Both resolutions contained a strong educational component.

The University of Utah School on Alcoholism and Other Drug Dependencies is one of the oldest, most prestigious Summer schools of its kind in the U.S. With over 1,000 enrollees annually, the School is divided into sixteen professional sections. In 1988, with cooperation from the ADA, the Utah School conducted its first Dental Section. Twenty-eight dental family members from fifteen states attended the Section. In November 1988 the Council on Dental Practice designated the Section as the primary "training resource" for members of the dental family wanting either basic or advanced education concerning chemical dependency and the dental family. The School is traditionally conducted the third week in June each year. The dates for 1989 are June 18-23. Registration information can be secured by calling the ADA toll-free number, extension 2622.

Immediate Help

Confidential "help-line" telephone numbers have been established in most states so that chemically dependent persons or significant others can call for help. A list of those numbers can be found in Table Two.

In an address written for a conference on the health of the dental professional, Dr. John-Henry Pfifferling, medical anthropologist, health educator and advocate for [chemically dependent] health professionals, wrote: "It is time that dentistry cares for its walking wounded, rehabilitates those who need help, and asserts its appropriate role in prevention. If we can't care for our own wounded healers, we may be in danger of losing our legitimacy as health care professionals and as leaders."⁶ Δ

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- **Council on Dental Practice**
- American Dental Association
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S. William Oberg

EXPLORING THE FUTURE OF CLINICAL DENTAL ETHICS:

A Summary of the Odontographic Society of Chicago Centennial Symposium

> Mark Siegler* James F. Bresnahan** David L. Schiedermayer*** Peter Roberson****

The Odontographic Society of Chicago has a long tradition of concern with ethical issues in dentistry. It has always been a recognized leader in promoting professionalism and ethical practice. Dr. Charles E. Bentley, who founded the Society in 1887 while a student at Loyola University School of Dentistry, was a strong advocate of ethics discussions during meetings of the society. Dr. Clifton Dummett notes in his biography of Dr. Bentley that, "Charlie Bentley's earliest recommendation as the Odontographic Society's first President was that a paper on ethics and ethical consideration be read before the Society."1 It is, therefore, historically appropriate that the Centennial Symposium of the Society dealt with the issue of ethics in dentistry.

In this short perspective we will summarize the conclusions of this two-day conference. We are forced

****Peter Roberson, DDS, Past-President, Odontographic Society of Chicago. to distill only the most crucial points from two days of thoughtful presentations and panel discussions. We will begin by defining dental ethics; then we will describe the problems participants perceived with the current state of dental ethics; we will conclude with specific recommendations for a teaching and research agenda in clinical dental ethics.

What is Clinical Dental Ethics?

Clinical dental ethics attempts to identify, analyze, and resolve the ethical, value, and legal concerns that confront patients and dentists in their daily encounters with each other.2,3,4 Clinical dental ethics focuses on decisions-the process and outcome of dental decisions -as they are reached in everyday dental practice.5 Clinical dental ethics inquires into the act of dental decision-making, and gives dentists useful and practical ways to integrate their clinical experience with practice, teaching, and research activities.

For many reasons, clinical dental ethics is similar to clinical medical ethics, and some of the ethical challenges faced by dentists are remarkably analogous to those faced by physicians. Physicians and dentists share similar backgrounds in basic sciences, similar responsibilities to diagnose, inform, educate, and treat patients, similar goals aimed at restoring health and function, and similar tensions in the multiple allegiances they have: to patients, to themselves, to their professions, and to society.^{2,6} Just as a strongly clinical orientation to medical ethics is an appropriate way to approach dilemmas in medicine, a strongly clinical orientation is appropriate in exploring the ethical challenges of practicing and teaching dentistry.

Major Problems in Current Dental Ethics

Like medicine, dentistry has been misguided in its reliance on conceptual and theoretical ethics to the relative exclusion of practical "clinical" ethics.⁷ Conceptual and theoretical dental ethics currently predominate; the lack of involvement by clinicians in dental ethics is disturbing. Theoretical dental ethics has failed to direct sufficient attention to many of the routine ethical problems which arise in the encounter between patient and dentist.

The pervasiveness of nonclinical dental ethics is exemplified by the authorship of the April 1985 ethics focus issue of the Journal of Dental Education. The issue contained 8 articles, only 1 of which was contributed by a dentist.⁸ There were no practical examples in the 53 page section. Unlike dentists and physicians, theoreticians prefer to argue from conceptual principles to the practical case,⁹ while clinicians necessarily must begin with the real problems of patients they encounter and move from these

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situations to an understanding of the ethical dilemmas of the profession.¹⁰ Practicing dentists are best able to understand the context of the clinical situation, and since they are involved as competent and respected role models, they are best able to teach dental ethics to dental students.

Theoretical dental ethics will not be incorporated into actual clinical decision-making in dentistry because it is not taught in the clinical setting by respected dentists. Alternatively, clinical dental ethics will become an important component of dental education only when it is taught and defended by leading dental practitioners and teachers.

Recommendations for a Clinical Dental Ethics Agenda

The majority of the speakers and panelists agreed that there were certain key issues which must be addressed in the future:

1. Doctor-Patient Relationship

a. Communication. In an era of scientific accomplishment and technologic possibility, dentists must teach their patients; when dental pathology exists, they must educate their patients about alternative treatment plans. Dentists are responsible for obtaining what is commonly referred to as informed consent. There is an increasing need to draw patients into a knowledgeable and cooperative alliance in dental treatment. Dentists and dental students must be taught how to communicate effectively with patients, and communication methodology must be a part of dental education and continuing dental education.

b. A Reaffirmation of Professional Character. Many patients see their dentist more frequently than their physician, and patients' personal secrets are often confided either in historytaking or in casual conversation. Confidentiality must be guarded strictly. The dentist works in close physical proximity to the patient, and there always has been and should continue to be a strong tradition of respecting patient privacy, sexual and otherwise.

> It continues to be desirable for dentists to have practical wisdom, to be tactful, gentle, and patient, and to have a sense of humanity and justice. For example, one important current and future ethical problem is the question of a dental duty to care for HIV antibody positive persons. The decision to treat such patients and others who pose potential risks is one

which may call upon personal courage and virtue. While such traits are difficult to define and evaluate, they remain an essential undergirding of the ethical practice of dentistry. Efforts should be made to select students who have the proper character traits to become skilled and ethical dental practitioners.

2. Malpractice. Malpractice litigation is an area of great practical concern in clinical dental ethics. There is a need to maintain high standards of care in dental treatment. While patients should be compensated for injury and while in some cases dentists' competency needs to be critically reviewed, burgeoning litigation threatens to destroy dental practice. It is sometimes difficult to practice dentistry in this environment, and it is important that dentists learn about and use available support groups while undergoing the stress of litigation. The reality of dental practice includes the possibility of making non-negligent mistakes or of experiencing "bad outcomes" even without making mistakes.

This reality must be communicated to the public and the legal profession, and clinical dental ethics can help more in this endeavor than can theoretical dental ethics.

- 3. Peer Review. A related issue is that of vigorous peer review. which aims at improving the technical performance and skills of colleagues who may not be performing up to accepted standards. One group which presents particularly difficult challenges is that of impaired dentists who suffer from substance abuse, psychiatric problems, or the infirmities of aging. A different challenge is represented by dentists who are deficient in knowledge or technical ability and who refuse to seek remedy for their inadequacies. Individual and corporate action is necessary and patient safety must take priority over an individual's freedom to practice. In the current competitive practice of dentistry, care must also be taken that peer review not be used to unfairly exclude or limit the practice of fellow dentists.
- 4. Technology. Technologic advances are a two-edged sword. While technology allows the dentist to treat more difficult problems, it increases the risks of certain procedures; increases specialization and fragmentation of the profession; and increases limits on any one individual's expertise. Technological advances force the dentist to make appropriate judgments about the indications for procedures, about

informed consent, and about when to refer to specialists.

- 5. Care of the Poor. Large numbers of Americans, especially the disadvantaged, are unable to afford dental care. The ongoing tradition of care of the indigent is one which requires further emphasis and re-examination as the health care system undergoes changes in structure and payment mechanisms.
- 6. Prevention. Dentistry is a profession which has historically worked for prevention, with the notable achievement in this century of fluoridation of the water supply. Such achievements are laudable and represent the desire of an ethical profession to reduce the incidence of disease in the most basic and fundamental ways possible.
- 7. Changes in Ethics Teaching and Research. The panelists and discussants concluded that there is a rich source of real case examples and actual clinical problems which should serve as the basis for training and research in clinical dental ethics.

Conclusion

Dentists are in the best position to identify their own practical ethical problems. Because of their technical competence and patient involvement, dentists would be the most credible teachers of dental ethics. Some academic dentists should pursue training and careers in a clinically-based study of dental ethics, and dentists in general should continue to attempt to combine their practice skills with ethical reflection. Those best able to explore the ethics of dentistry are those who practice dentistry. Δ

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LEADERSHIP

Convocation Address

General P. X. Kelley*

Let me first thank your President, Doctor/Admiral Bob Elliott, for this unique honor. To address the American College of Dentists during its annual convocation is an experience which I shall treasure always—for it is no secret, nor was it during my 41 years of service to my country—that my respect for the profession of dentistry is deep and abiding.

In a letter to me last year, Doctor Gordon Rovelstad, your very capable Executive Director, described the purpose of this Convocation. He said that it, "... is held each year to give recognition to those dentists who have made significant contributions to the profession or to the public in the areas of literature, research, public service, and/or education." In spirit, then, this is the Olympics of dentistry, and each of the 304 Fellows is a gold medal winner. Said another way, your induction into the prestigious American College of Dentists is a testimonial to your past, present, and future willingness to assume a position of responsibility in an organization which has as its foundation the promotion of the highest standards of ethical conduct in the delivery of essential dental care to the public.

Doctor Elliott has suggested that I talk about leadership, and I shall do just that. Before doing so, however, let me say clearly and unequivocably that you are members of one of the most demanding and respected professions in our country. Don't ever forget it, for it is your priceless heritage.

Webster defines leadership as the capacity or ability to lead—and, if you look closely at the active verb "lead," you will find many definitions. Being a Marine for all of my adult life, however, I like the definition which says: "To show the way to by going in advance." To me, this is the essence of a true leader—one who is willing to risk some facet of himself or herself for a larger calling. Teddy Roosevelt captured this feeling in his writings on our "American Ideals" when he said:

"Shame on the man of cultivated taste who permits refinement to develop into a fastidiousness that unfits him for doing the rough work of a work-a-day world. Among the free people who govern themselves there is but a small field of usefulness open for the men of cloistered life who shirk from contact with their fellows. Still less room is there for those who deride or slight what is done by those who actually bear the brunt of the day; nor yet for those others who always profess that they would like to take action, if only the conditions of life were what they actually are. The man who does nothing cuts the same sordid figure in the pages of history, whether he be cynic, or fop, or voluptuary. There is little use for the being whose tepid soul knows nothing of the great and generous emotion, of the high pride, the stern belief, the lofty enthusiasm, of the men who quell the storm and ride the thunder. Well for these men if they succeed; well also, though not so well, if they fail, given only that they have nobly ventured, and have put forth all their heart and strength. It is war worn Hotspur, spent in hard fighting, he of the many errors and the valiant end, over whose memory we love to linger, not over the memory of the young lord who 'but for the vile guns would have been a solider.'

I congratulate each of you on this

very important day—it is a day of great and generous emotion, of high pride, of stern belief, and of lofty enthusiasm. It is a day when you assume an ever increasing responsibility for leadership in your chosen profession. In reality, it is the first day of your new life in the service of your fellow man.

There are some who may ask, "What has leadership got to do with dentistry?" I will respond with one exclamation—LOTS!

In every profession, if that profession is to flourish, there must be leaders. There must be men and women of vision—men and women who manifest the highest qualities of leadership such as integrity, industry, energy, initiative, determination, enthusiasm, firmness, kindness, justness, self-control, unselfishness, honor, and courage.

Permit me, if you will, to dwell on the first, and in my mind the most important of these qualities—integrity—for without integrity there can be no effective leadership—it is the bedrock of our society.

Integrity, or, put another way, the standards of right behavior, encompasses many facets, and, like beauty, is often in the eye of the beholder. For discussion purposes, let's look at it through the eyes of an old Marine.

First and foremost, I doubt seriously if there is one of you here today who does not covet the respect of his fellow dentists. The cornerstone of this respect is character, high character, and this means living within the letter and spirit of the law and acceptable social standards. To do less compromises your personal standards of right behavior.

Next, you must have the power of decision. How many successful businessmen, doctors, fellow dentists, lawyers, engineers, industrial-

^{*}General P. X. Kelley, U.S.M.C. (RET.), 28th COMMANDANT OF THE MARINE CORPS.

ists, and the like, do you know who do not have the guts to make a decision? I'll wager not too many. And, I don't mean easy decisions—I mean the tough ones—the ones which separate leaders from followers. I mean the ones when it could have been much easier to stand back and let someone else make the decision for fear of being wrong. Our society would be paralyzed were it not for those willing to stand up and be counted at decision-making time.

Third, after you have selected a profession—in your case the profession of dentistry—you must always strive to be the best. How easy it is for some to languish in the comfort of a lounge chair, but not our "Hotspur." He will always sharpen and hone the tools of his trade through vision, devotion, dedication, and just plain hard work. Everyone respects an individual who knows his or her business. Obviously, you know yours!

Next, you must be scrupulously fair and understanding in your dealings with others. Our society cannot afford prejudices based on race, creed, color, or national origin. Treat all others as you, yourself, would like to be treated. If we all did that, what a beautiful world we would have.

You must be calm under stress, or at the very least successfully conceal the fact that you are not. Rudyard Kipling said it all in his famous poem, "IF." The first and last stanzas capture the rich Kipling flavor: "If you can keep your head when all about you are losing theirs and blaming it on you yours is the earth and everything that's in it, and, which is more, you will be a man, my son!"

You must always be accessible. I had a philosophy which was my guiding light for 37 years as a Marine: 0800–1630 was people time. You can always catch up on what you thought was essential paperwork during evenings or on weekends, but, once neglected, you will find it difficult, if not impossible, to catch up on people. Needless to say, this philosophy would have to be modified somewhat for your profession, but the general principle remains. Being accessible demands time, but there is no better way to spend your time. Time with people and people oriented organizations is never wasted.

Let me leave this subject with a short story about how time with people can be well spent. This involves a young, black Lance Corporal who worked under me while I was a regimental commander in Vietnam. Let's call him Lance Corporal Jones. It seems that Jones had a well-deserved reputation as a malcontent and trouble-maker. One day I was walking up a path to my bunker and noted Jones cutting grass nearby. I made it a point to engage him in a conversation. I asked him where he was from, and he told me Philadelphia. When I informed him that I had graduated from Villanova, he told me that he had attended the Philadelphia Conservatory of Music for twelve years. Needless to say, I didn't expect such an answer, and I then asked him what instrument he played. The violin, he replied. For my next question, I asked if he thought that a lay-off of over a year would have any effect on his playing ability. He really didn't know, but expressed some concern-particularly with the knowledge that his mother and father had worked so hard for his education and to buy him a quality violin. That evening I contacted our Division Special Services Officer to ask when he would be going to Hong Kong to purchase recreational equipment, which he did from time to time. When he gave me a date, I asked a favor: "Will you buy me a violin?" You can imagine the look on his face, and I eased his concern somewhat by convincing him that every Marine regimental commander needed a violin. And so it was that a beautiful violin, together with a pitch pipe, appeared on my desk the following week. It was then that I experienced a sinking feeling in the pit of my stomach-did Lance Corporal Jones really play the violin, or had I been the victim of a con job? And, if

he didn't, what was I to do with a magnificent violin in the middle of Vietnam? With justifiable nervousness, I sent for Jones, and when he reported in front of my desk I asked: "Lance Corporal Jones, last week you told me that you played the violin, is that correct?" He replied that it was, and I then said: "Please turn around and play me something." As he turned he caught sight of the violin I had placed behind the door, and tears streamed down his face. My fears were put to rest when he tucked his new violin under his chin and his left hand went expertly to the strings. There was no doubt-he was a violinist. He played at church services each Sunday and at gatherings we had at our enlisted club. He became one of the most popular young Marines in our camp, and I am pleased to footnote this story with the fact that he became a superb human being in every sense of the word. The moral of the story is, of course, that there was something very important lacking in his life, and once this need was satisfied he was well on his way to bigger and better things. Now, I'm not suggesting that we all rush out to buy violins for those who we know have problems, but I am suggesting that by knowing your neighbor we will all have a better life. Think about it!

As you savor this important milestone in your lives, let me share with each of you a precious phrase—one which has provided untold inspiration to some four million Marines during over two centuries—SEMPER FIDELIS —ALWAYS FAITHFUL—and I ask that you forever be:

Semper Fidelis to your God Semper Fidelis to your country Semper Fidelis to your family Semper Fidelis to your fellow

man And, Semper Fidelis to your

great profession.

God bless you, each of you, and God Bless America, the land of the free because it remains the home of the brave. Δ

THE MANY FACETS

Section Representatives Meeting Panel

Leadership is with-

out question one of the most commonly

observed and the

phenomena on the

face of the globe. A

understood

The Role of the Practitioner in Leadership

Richard J. Reynolds*



Richard J. Reynolds

recent survey revealed that there are 130 definitions of leadership. For our purposes leadership may be defined as the act or process of influencing the activities of an organized group in its attempts toward goal setting and the achievement of a desired outcome. It can be said that

least

leadership is an exercise in which not one individual has exclusive authority but in which relatively many are involved. Certainly in our profession we are dependent on leaders at every level of our organizational structure-local, state, regional, and national. Leadership in the dental profession is dispersed to an extraordinary degree. In the American College of Dentists every fellow has the potential of exerting influence and is to that extent a leader. At the same time, all of us have been and will continue to be influenced by others and so must, to a certain extent, be followers as well. Most, if not all of us, chose dentistry as a career because of the influence of a role model who by example was able to lead us in this direction. It is axiomatic that our ability to lead and

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

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Leadership Role in Education

Allan J. Formicola*

Academic institutions and their leaders are generally thought to resist change. In 1983, George Keller put today's challenge before academic leaders in these words: "American higher education has entered a new era that requires better planning, strategic decision-making, and more directed change." In his book, Academic Strategy: Management The



Allan J. Formicola

Revolution in Higher Education, Keller quotes Will Rogers' famous line, "Even if you're on the right track, you'll get run over if you just sit there," to help describe the challenge before American universities¹. Universities resistance to understanding modern management as a method to deal with the rapid changes taking place in today's environment must be broken down according to Keller. He urges America's 3,100 colleges and universities to adopt strong leadership and strategic planning as the key to successfully moving academia forward during these turbulent times. Keller's book suggests that to respond to the complex economic-societal changes of the 1980's and the 1990's will require a different type of academic leadership than ever before.

While I cannot speak for academic leadership as a

*Allan J. Formicola, DDS, Dean, Columbia University, School of Dental and Oral Surgery.

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OF LEADERSHIP

Discussion

Moral Dimensions of Leadership

Laurence B. McCullough*

and the

Ethics in Dentistry

Philosopher's Role

In this speech I

shall address the

moral dimensions of leadership in den-

tistry, drawing upon

the language of eth-

ics and the academic discipline of philoso-

phy, in which I am

trained. Ethics is the

disciplined study of

Ethics



morality. seeks to provide rational, clear, consis-Laurence B. McCullough tent, and coherent accounts of the two basic elements of morality: (a) the rules that ought to guide our conduct; and (b) the virtues that ought to shape and define our moral character. Both are essential to ethics and dentistry, as I have argued elsewhere.^{1,2} The virtues are especially relevant to a discussion about the moral dimen-

sions of leadership in dentistry, as I hope to make clear in what follows.

In philosophy, our role model is Socrates, who-you will recall-described himself as both a midwife of ideas and as a gadfly on the rear flanks of Athens.3 In this article I am going to take seriously the indebtedness of philosophy to Socrates' second role and his willingness to discomfit, to be indeed vexatious to the spirit. This was not a self-serving end for Socrates, but rather a means to provoke thought, as I

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The Health Professional as a Citizen

Lynden M. Kennedy*

We, in the profession. are richly blessed people. We been given have much: respect, high ratings in public opinion polls, comfortable homes, for most of us some degree of affluence. and generally considered to be substantial citizens.

To some extent we have inherited these accolades but their genesis was not as charitable gifts. To steal a bit of John



Lynden M. Kennedy

Houseman's thunder-the profession got them the old fashined way-they earned them! They were earned by dentists present, and dentists past, who gave of themselves, their talents, their humanity and their concern for their fellow man.

When I think of respect my mind goes way back to a movie I saw many years ago. There was a series of "Andy Hardy" movies featuring Mickey Rooney and Lewis Stone. Lewis Stone played the part of the father, a judge, and Mickey Rooney was one of his children-Mickey Rooney was sure enough a youngster at that time. In the picture Andy Hardy was complaining to his father, the judge, because he wasn't getting the respect he thought he was due from his sister. The Judge told him that he generally found that if a person deserved respect he usually got

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serve the interests of our colleagues can be measured in terms of our influence upon them. Our top leaders have an indispensable role in keeping the members of our profession abreast of legislation affecting dentistry, alerting them to bureaucratic intrusions in the name of consumerism, economic and societal concerns and in providing us with a sense of true purpose and direction as we attempt an appropriate response. This requires dental statesmanship and cool headed diplomacy. It has become increasingly apparent that our top leaders are less and less able to make the system work without the active collaboration of our membership at all levels. It is true that good constituents tend to create good leaders, just as a good offensive line is necessary for the leader of the team, the quarterback, to look good and to perform well. A few years ago I noticed a proverb attached to the refrigerator in a home I was visiting that said, "If only those birds sang that sing the sweetest, the woods would be silent indeed." We can all be leaders within the limits of our own talents and capabilities.

I should like to draw an analogy between the American College of Dentists and the biblical story of the army of Gideon with which we are all familiar. As you recall, the Midianites were making life unbearable for the Israelites, plundering, stealing their sheep and oxen and laying waste to the land. The Israelites were left without sustenance and they cried out to the Lord-Finally the Lord responsed by appearing to Gideon, saying, "The Lord is with you, you mighty man of valor. Go and deliver Israel from the hand of Midian." Gideon said, "Pray Lord, how can I deliver Israel. My clan is the weakest and I am the least in my family." The Lord reassured Gideon and promised him that he would triumph. Gideon assembled an army of so many men that the Lord said there were entirely too many-Gideon addressed the multitude of soldiers and invited those who were fearful and trembling to return home. 22,000 left and returned to their families. The Lord seeing the 10,000 soldiers who remained observed that there were still too many. He ordered Gideon to take his troops to the water where they would be tested. Those who stopped and knelt to drink were dismissed and those who lapped the water, without stopping, putting their hands to their mouth numbered 300. The Lord kept his promise: although small in number the army prevailed over the Midianites. Surely, there is a parallel to be drawn between the Army of Gideon and the $3\frac{1}{2}$ %-4% of the dental profession making up the membership of the American College. Furthermore, the active and dedicated who take their fellowship seriously and participate in the affairs of the College represent the 300. Leadership and professional success are not harnessed to the concept of profitable practice management. As important to our economic survival as money making is, those dentists who have an overwhelming preoccupation with monetary gain are not the true leaders. This is not to say that there is anything wrong, unethical or unprofessional in realizing a profit. Justice requires financial benefits to the practitioner by way of reciprocation. The covenant that exists between the practitioner and the patient provides that in return for the value of the services received it is obligatory that the patient honor his part of the transaction. On the other hand, it was Sir Thomas Browne, a 17th Century physician and philosopher who stated that "no person should approach the temple of science with the soul of a money changer." There is an ancient Jewish midrash or narrative used to illustrate a religious teaching that is applicable. So the story goes, a man was summoned to appear before the King. Terrified, he sought the comfort and support of his 3 friends and entreated them to go with him. The first friend declined, saying he could not go. The second friend replied that he would be able to accompany him only as far as the gate. The third friend responded, "Go in peace. I shall not desert you, I shall gladly accompany you. Yea, I shall precede you on the way and testify in your behalf." The significance of this story is that every man has 3 friends: the first friend-his property and worldly possessions; the second friend-his family; the third friend-his good deeds.

Those dentists who go to their office daily on a round trip basis, having no time for good deeds and the discharge of those responsibilities incumbent upon professional and civic leaders, are neither contributing their fair share to the community nor to the public perception of our profession.

I need not remind you that approximately 1/3 of all nominations for fellowship in the College are turned down annually by the Credentials Committee for one reason or another. Oftentimes it is an incompletely filled out nomination blank which fails to elicit the fines of his office.

It has been said that the world stands aside and allows to pass the man who knows whither he is going. A poem by C. E. Flynn entitled TRUE GREAT-NESS says:

full scope of a candidate's professional and civic

activities and accomplishments. Unfortunately, the

sad fact is that all too often the fault lies in the

candidate's weak record of service beyond the con-

There are countless opportunities for community

service which increase the visibility and exposure of

dentistry in the public eye and at the same time make

the city or town a better place in which to live. To

mention only a few, first of all we should consider as a

top priority membership and active participation in

organized dentistry at all levels-component, constit-

uent and national. One might choose membership on

the board of philanthropic organizations such as the

United Way, Red Cross and the Salvation Army, or

one of the variuos fine arts support groups, such as the Symphony Society or opera and ballet associa-

tions. Church involvement can include sitting on the

governing board of the church, teaching Sunday

School, ushering, singing in the choir, or coaching

one of the church sponsored athletic teams. These and many other options, could be selected according

to the talent, interest and willingness of the individ-

ual. Membership and participation in one of the civic clubs such as Rotary, Kiwanis or Lion's Club provide

opportunities that are rewarding in terms of service and fellowship with community leaders. Some of our

colleagues have chosen to go into politics and have

A man is as great as the dreams he dreams, As great as the love he bears; As great as the values he redeems, and the happiness he shares. A man is as great as the thoughts he thinks As the worth he has attained; As the fountains at which his spirit drinks And the insight he has gained. A man is as great as the truth he speaks, As great as the help he gives, As great as the destiny he seeks,

As great as the life he lives.

The 4-way test of the things we think, say or do

serves as a guide to all members of the Rotary Club International throughout the free world. It is only fair to say that Rotarians represent a cross section of the top business, civic and professional leaders wherever they may be located. The 4-way test is a series of 4 questions:

- 1. Is it the Truth
- 2. Is it Fair to all concerned
- 3. Will it build Goodwill and better Friendships
- 4. Will it be Beneficial to all concerned

This test was formulated in the 1930's and, as those of you who are old enough to have lived through the period of the Great Depression will remember, it was a time of great crisis in the history of America. Herbert J. Taylor, a Chicago Rotarian conceived the test soon after being made President of a large kitchenware company which was teetering on the brink of bankruptcy. His purpose was to create a way to develop among his employees, leadership qualities of character, dependability and willingness to serve cheerfully the company and its customers. His insistence on the application of this test in the daily operation of the company had the desired effect. Under his leadership, the company overcame its financial difficulties and prospered.

Dr. Ernest Wilkins, Dean of the University of Chicago defined a leader as one who possesses or gives definite promise of developing many of the 9 Intellectual, 4 Physical and 7 Moral traits. The Intellectual traits he enumerated were Technical ability, Power of expression, Accuracy of observation, Perseverance, Power of concentration, Sense of proportion, Intellectual curiosity, Power of initiative, and Ability to reason.

The Physical traits required were Health of body, Appearance, Manner or bearing (and I would take the liberty of equating this trait with professional dignity) and Attractiveness or personal charm. The Primary moral qualities were Ability to cooperate, Moral cleanness, Honesty, Faith in knowledge, Purposefulness, Vision and Social mindedness. Our profession has consistently ranked near the top of the Harris, Gallup and other polls taken to determine the relative standing of the various occupations in terms of public respect and confidence. A quarter of a century ago it was brought to the attention of the American College of Dentists that Scandinavian dentists ranked #1 in terms of public esteem—ahead of medicine and the clergy. An attempt was made, by means of a rather comprehensive questionnaire, to discover the reason for the phenomenal public acceptance of dentists. The results were disappointing and inconclusive—It was decided that only through the manifesting of professional dignity, ethical and moral behavior, competence, compassion and caring can professionals demand and deserve the trust and confidence of the people they serve. Emerson said, "True worth is exemplified not in possessing honors but in deserving them."

It goes without saying that the interface between the public and the dental profession is at the level of the individual practitioner. The public perception of dentistry is a composite of the experiences involved in individual dentist-patient relationships. Our public perception cannot and must not be taken for granted. We have been endowed with the heritage of those who came before us and it is our sacred duty to preserve this legacy for those who come after us.

Dr. Edmund Pellegrino, the Director of the Georgetown University Kennedy Institute of Ethics has stated that in his opinion we are in one of the most unsettled states in the history of the healing professions. In the last 20 years that edifice of medical ethics which has persisted for 2500 years has come under the most careful scrutiny. Every single one of the prescriptions of the Hippocratic oath has received criticism.

As a result of the Supreme Court decision and the F.T.C. insistence that the healing professions may not adopt rules which, in their opinion, clearly have the purpose of restraining competition, professional leadership has taken on added significance. In the face of the constraints laid down by these decisions we have a much more difficult task of deciding what kind of conduct and standards our leaders are legally able to insist upon among present and future practitioners. The Federal Government's intrusion into the dental profession and the emphasis on marketing and the soliciting of patients has had a chilling effect on the morale of the profession. The effort of Government to underscore the commercial rather than the altruistic professional aspect of practice and the diminution of the time honored principle of professional self-governance cause us to feel betrayed. In spite of the fact that we have suffered injury by these profound changes, we must maintain our professional pride. We must continue persevering and stressing our commitment to competence, honesty, and caring service as a way of rising above these challenges.

I should like to conclude with the comfortable words contained in the Desiderata. "Go placidly amid the noise and haste and remember what peace there may be in silence. As far as possible, without surrender, be on good terms with all persons. Speak your truth gently and clearly; and listen to others, even the dull and ignorant; they too have their story. Avoid loud and aggressive persons, they are vexations to the spirit. If you compare yourself with others you may become vain or bitter; for always there will be greater or lesser persons than yourself. Enjoy your achievements as well as your plans. Keep interested in your own career, however humble, it is a real possession in the changing fortunes of time. Exercise caution in your business affairs; for the world is full of trickery. But let this not blind you to what virtue there is. Many persons strive for high ideals; and everywhere life is full of heroism. Be yourself. Especially do not feign affection. Neither be cynical about love, for in the face of all aridity and disenchantment it is perennial as the grass. Take kindly the counsel of the years, gracefully surrendering the things of youth. Nurture strength of spirit to shield you in sudden misfortune. But do not distress yourself with imaginings. Many fears are born of fatigue and loneliness. Beyond wholesome discipline be gentle with yourself. You are a child of the universe, no less than the trees and the stars, you have a right to be here. And whether or not it is clear to you, no doubt the universe is unfolding as it should. Therefore, be at peace with God, whatever you conceive Him to be, and whatever your labors and aspirations, in the noisy confusion of life, keep peace with your soul. With all its sham and drudgery and broken dreams it is still a beautiful world. Be careful. Strive to be happy." \triangle

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whole, I can make some observations on what appears to be a changing new leadership in Dental Education by drawing upon my experience in dental education over the past two decades. I believe many of my remarks will be appropriate to all segments of higher education. To understand the nature of the leadership emerging in today's dental schools, however, it is necessary to first briefly explore two of the major factors underlying why leadership in dental education is now changing. They are: (1) the decline in interest in the profession by American college-age students, and (2) an identity crisis for dental schools within American universities.

These two important factors have acted so far in the 1980's as an environmental "quicksand" for the deans and department chairmen of the 57 dental schools in the United States. More often than not, dental school leaders are finding that the tried and true solutions of yesterday no longer apply to today and certainly will not hold up for tomorrow. Deans and department chairmen must deal with a set of complex, often confusing and conflicting issues, over which they often have little to no control. This requires a different type of leadership in the dental schools than perhaps existed in the 1960's and the 1970's.

Before I present to you the good news on how I perceive the dental school leadership responding, let me briefly discuss with you these two issues which leaders in dental education must deal with today.

The Decline in Interest in the Profession

The list of reasons for the significant drop in applicants to dental schools is long. The disinterest in the dental profession as a career by the youth of the United States in the 1980's is similar to the periods immediately prior to World War II and just after the Korean War. The drop in applicants to dental schools over the past decade can only be described as disastrous. Enrolling classes when there was a high of 2.1 applicants per position available in the early to mid-1970's was a relatively simple matter that received little to no attention from deans and faculty. Today, when there is perhaps only 1.3 applicants per position available (1987 entering class), and that is after a national cutback of over one-fourth of the entering freshman positions, the leadership in dental education has come to realize that survival of the schools and the very profession is at stake. Coming up with innovative solutions for this disinterest in dentistry by college students today has been an underlying reason for the emergence of a dynamic new leadership in our schools. Coping with this problem has required schools to attract different types of leaders than in the past. Leadership could no longer afford the luxury of staying within its "ivory tower," waiting for good students to discover dentistry. Instead, leaders today have had to adopt strategic thinking and reach outside their walls to first understand college student's disinterest in the profession and then to do something about it.

As dental school leaders in the 1980's have begun this task, they have found that they are often confronted with several constituencies with a poor understanding on the changing nature of oral disease and its impact on the profession. Government, the public at large, university officials, and even those of us within the profession have read and believed misdirected headlines in newspapers proclaiming that the reduction in dental caries heralds the demise of the profession! Fueled by a lack of capacity within the profession to carefully analyze and then accurately respond to these headlines, the newspaper reports have left the impression in the minds of the dentiststo-be and others that there is no need for dentists any longer. A lack of clear thinking and constructive debate from within the profession in the early 1980's on the impact of important epidemiologic findings of disease reductions on the profession have only made matters cloudier and more difficult for all leaders in dental schools. Up until recently, it has been difficult, in short, for school leaders to explain whether dentistry will be a good profession for today's youth to enter. To cope with this issue, new leadership skills are required.

In the early 1980's, however, the initial response of dental school leaders to this disinterest and cloudy picture of the profession can best be described as confusion, and "gloom and doom". A common solution to the mounting pressures on dental schools seemed to be emerging in the early 1980's and talk of school closures prevailed. In fact, three schools did close in rapid succession. Parent universities were beginning to adopt such a dramatic solution to the problems of their dental schools because few solutions seemed to be coming forth from the leaders in the profession and this stimulated the second reason for a change in the type of leadership in the schools. Let's briefly explore the University environment facing the dean and department chairmen.

The University Environment for Dental Schools

Universities have been stressed by the rapidly changing times and all elements of the university have come under scrutiny. As dental schools are reviewed by their parent universities, they are finding that the schools have often not become integrated in the Universities. As long ago as 1926, William Gies, a professor of biochemistry at Columbia who authored the famous Carnegie Commission Report which established dental schools as part of universities, urged dental schools to adopt missions, such as research, which would make them part of the university environment. But for a variety of good reasons, many dental schools have not had the capacity to fully carry out Gies' plan for integration within the universities. In 1984, Melcher questioned the role of dental schools within universities. He asked the followed:

"I would like to suggest that it is still arguable whether faculties of dentistry have established beyond question their right to a place within the walls of academia, and that we would do well to examine our qualifications for enjoying this privilege. . . Could we not equally well produce competent dentists in community or technical colleges and in outpatient departments of hospitals? I think that, on our present record, we may be hard-put to defend ourselves."²

So not only are today's leaders coping with difficult issues outside their walls, they are faced with new challenges from within their own university environment.

The Changing Leadership Role

Some of my best friends are dental school deans, but I can tell you that they were not a fun group to be around in the first half of the 1980's as they tried to cope with this extraordinarily difficult environment. The gloom and doom talk which prevailed cast a shadow over all schools. However, over the past three years as the shock of the closures and cutbacks in enrollment has become a reality, a bold, new, and innovative type of leadership appears to be emerging from the nation's dental schools. A recognition has taken place among the leaders that the downsizing of schools and the system of dental education in the nation does not necessarily mean disaster and, in fact, the difficult times could even reflect new opportunities. Gloom and doom talk has given way to "cloud with a silver lining" talk.

Now, leaders at all levels in the dental schools appear not only to be coping with the complex changing issues but new and often innovative solutions appear to be emerging. Credit for this new and what I would characterize as "take charge" leadership attitude goes in part to the Pew Foundations' \$8.7 million National Program for Dental Education. In the first phase of this program, the Pew Foundation funded dental schools to learn about leadership, management and the role of strategic planning in coping with change. Faculties throughout the nation began to examine the factors impacting upon them. As a result, a new understanding of the implications of demographics and changes in disease patterns has resulted and leaders in schools have begun the difficult task of drawing up realistic new plans to bring their schools forward during these most complex times. Leadership itself has taken on a new meaning within schools and Deans have begun to educate themselves in management strategies. Deans have started to recognize, with new appreciation, their department heads and faculties' roles in charting new and interesting ways to revitalize their schools during rapidly changing times.

The second phase of the Pew Foundation initiative was recently put into place and has led many schools to implement new initiatives to address the complex issues before them. As a result, a spark of enthusiasm has returned in the schools. As the 1980's close, many dental school leaders have a much deeper understanding of what leadership is all about and the importance of it to move their institutions foward.

Leaders are beginning to appreciate that in order for schools to function in today's society, deans and department heads must exert a new type of leadership as they seek out innovative solutions to complex problems. No longer can leadership be passive; instead, today's school leaders must be active seekers of clear answers to difficult problems. To do so, leaders today must employ modern management systems within the schools to collect and accurately assess data. To make use of such systems, deans and department chairmen must become more sophisticated in organizational behavior and encourage new ways of involving their faculties in implementing solutions to the complex problems they face. A dean or department head no longer can be successful by virtue of their past academic or clinical accomplishments.

So the very nature of the leadership role has changed today. Brought upon by the more complex issues facing schools, leaders today need new skills to successfully keep their schools moving forward. Most dental school leaders are not trained for this new role, but the good news is that many of them recognize that fact. They are taking the initiative to equip themselves with the skills required. For example, with the help of the Pew Foundation, 238 faculty from 39 dental schools attended formal coursework on leadership at the Center for Creative Leadership in Greensboro, North Carolina. Just this past summer, thirty-six of the United States deans also attended a three-day workshop on organizational behavior funded by the Pew Foundation³. This willingness to upgrade leadership skills shows both a recognition and willingness on the part of today's dental school leaders to do what is necessary to move their schools forward during difficult times.

How dental education will emerge from today's times and what it will look like in the 21st Century is anyone's guess. It is apparent, however, that the successful new leaders emerging for the 1990's will be those who have bold vision for our profession fortified by a willingness to employ modern management techniques. These traits will be required to move schools forward into the next century. As dental school leaders cope with today's complex times, they deserve the encouragement of the entire profession. Such encouragement is necessary to help them set the proper course over the next ten years. Much is at stake. If dentistry is to remain a vital and important part of the health professions, schools of dentistry must emerge from this period of readjustment stronger than they entered.

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also hope to do. Socrates took up his role as gadfly because he saw Athens as a city in crisis. I believe that dentistry in the United States is in a crisis, a deep crisis: its moral traditions as a profession are in danger of collapse, maybe even irreversible collapse. The moral dimensions of leadership in dentistry concern whether this grim picture of its future will turn out to be accurate.

Two Senses of Leadership

Any discussion of the moral dimensions of leadership in dentistry must begin with a distinction between two senses of leadership. The first sense of leadership concerns the organization and direction of human and material resources to goals or purposes upon which everyone involved already agrees. General Dwight Eisenhower, as Supreme Commander of the Allied Forces in World War II, is perhaps one of the best examples of this sort of leadership in our century, particularly in his generalship of the invasion of the European continent. We see, alas, a cheapened version of this sense of leadership in recent and contemporary presidential politics in our civic lives in this country.

The second sense of leadership is more demanding, both of leaders and those who look to leaders for guidance and motivation. I have in mind here the complex tasks of articulating and working toward goals that people ought to be seeking but with which they do not agree or with which they may even actively disagree.

The first sense of leadership in dentistry would indicate that the task is relatively simple. The leadership in dentistry should seek to deepen and enrich dentistry as a profession. This would be an adequate understanding of the moral dimensions of leadership in dentistry, if dentistry is not in the sort of crisis I have described above. If you think that I am mistaken in my concern about the crisis in dentistry, you need read no further, for the first sense of leadership will do. It is surely important and therefore should be cultivated.

However, if I am correct about the crisis in dentistry then the task of leadership in dentistry is radically different: to save dentistry from ceasing altogether to be a profession in any morally significant sense and devolving into simple entrepreneurship. Now, entrepreneurship has a proper place in dentistry, for it is an important means to the goal of professional practice, where being a professional means that you are focused primarily on the best interests of the patient and only secondarily on your own interests, e.g., in remuneration. The crisis in dentistry is that this understanding of the relationship between the moral life of a professional and the inescapable entrepreneurial life of a professional is in danger of being reversed, with professional practice the means to entrepreneurship rather than its proper or purpose.

There may be more at stake here than the moral life of professionalism in dentistry. In my view, dentistry is "ahead of the curve" historically vis-a-vis medicine, which, while in a similar crisis, is not as deeply involved yet. This may also be the case for nursing, but this matter seems less clear to me. Thus, how dentistry responds to the challenges of the second sense of leadership has important implications for medicine and perhaps for nursing as well.

The Sources of the Moral Crisis of Professionalism in Dentistry

In my experience with dentists, external forces or entities are quickly identified as the source of the problem. In particular, the actions of the Federal Trade Commission, along with changes imposed by public and private payers, are seen as the villains. This view of things is a mistake, for it masks the deeper problems. These external entities are not forcing dentists to do anything, although they are surely changing the cues in the environment, to utilize a biological metaphor. How dentists are responding to the cues or incentives are matters of free choice, not legally compelled behavior. Thus, for example, franchise dentistry with all of its built-in conflicts of interests for dentists-as-employees is not an entity compelled into existence by external forces and no one compels dentists to choose to work in such settings. The shift in thinking of one's fellow practitioners away from the language of "colleague" to that of "competitor," with subsequent attention to market share and market segmenting, and distinguishing your product from that of others in the market, are the results of free choices of dentists about how they will respond to the changing cues in the complex financial and governmental conditions of the practice of dentistry in the United States.

The conditions for this narrowness of vision on self-interest beginning to supplant the necessarily more generous vision of the professional dentist on the best interests of patients are put in place, to an alarming degree, during the process of dental education itself. Faculty describe colleagues as competitors. The demand to complete requirements provides students with powerful incentives to sacrifice the best interests of patients in the pursuit of self-interest. The over-emphasis on technical skills, to the virtual exclusion of cultivating the skills of clinical reasoning and clinical judgment, undermines the intellectual foundations of professionalism in dentistry. As dentists increasingly become directed to the management of chronic oral diseases and to the oral health needs of an increasingly aging society in the United States, the latter skills will become crucial.

The upshot of these and other factors that you, no doubt, know better than I is that economic survival has become the goal in practice, a natural extension of the goal of surviving the requirements of training in dental school. At the individual level, the economic survival of one's own practice moves to center stage, with patients moved to the side or maybe even off stage. At the level of the organized profession in the United States, the economic survival of the guild becomes paramount and the tradition of the service of the profession to the public dims and fades. Selfinterest, rather than the best interests of the patient (both individual and community), is increasingly dominant. This way the crisis lies.

Responses to the Moral Crisis of Professionalism in Dentistry

I want to be clear about what I do *not* accept as a legitimate response to this crisis, namely, the assertion that self-interest has no place in the moral life of a professional person. I say this because I am committed to the view that cultivating the virtues of the professional person, e.g., the willingness to sacrifice something of oneself to be of assistance to others in need, is entirely compatible with a prudential regard for legitimate self-interest. In other words, I believe that an appropriate response to the crisis in dentistry that I have described is an intellectual one: the demanding and, at times, frustrating task of disentangling legitimate self-interest from mere self-interest.

Legitimate self-interest involves at least two elements. First and foremost are the ethical obligations to others that one has freely undertaken and from which one is not free unilaterally to release oneself, e.g., obligations to spouse and children. Second are those activities that either are directed to being well prepared to care for patients, e.g., rest and quiet time for reading and puzzling about patients' problems, or that are directed to the development of other talents that lend significance and fullness to a life. Attending to the economic dimensions of practice falls within the second element of legitimate self-interest, because the *economic stability* of a practice is a necessary condition for caring for patients. When more than stability becomes the object of concern, patients become mere means to the economic ends of their dentists, or of the guild, and dentistry begins to undo itself as a profession.

There is not only a great deal at stake for dentistry here, if this grim possible future indeed becomes reality or is already a reality for dentists, then this would be a reality for patients also. I say this because when I, as a patient, become a means to your mere self-interest, than we shall find ourselves in the world so well described by Thomas Hobbes several centuries ago⁴: the war of all against all in the pursuit of self-interest. Nervous and suspicious patients, no longer able to trust their dentists, come into the care of grimfaced and probably increasingly unhappy dentists. No one wins.

Pluralistic Dental Ethics

The intellectual task of sorting legitimate from non-legitimate self-interest points the way to what I believe will be a viable response to the crisis in dentistry: the development of pluralistic dental ethics. The older, potentially tyrannical model that "my patients always come first" gives no room to legitimate self-interest and, in my experience, repels younger dentists. The problem is that the profession offers them no viable alternative. No wonder that mere self-interest looms so large; we should expect nothing less when younger dentists confront a stark "either/or" choice.

The problem here is a lack of imagination, compounded by going it alone. What dentistry needs is an imaginative grasp of the plurality of reasonable accounts of how self-interest should properly find a balance against the best interests of patients. This is what I mean by the phrase "pluralistic dental ethics." That is, we can work at marking out the continuum of legitimate models of the moral life of professionalism in dentistry, rather than insisting on and clinging to an older model that many dentists rightly suspect of being tyrannical in its demands. Not going it alone means opening dialogue with the other health care professions, particularly medicine. These are demanding goals and I am confident that the journey to them will be full of turbulence, most of it-I believe-creative turbulence. Only the second sort of leadership I described above is fit to this challenge. Dentistry would do well to cultivate it and to turn aside from the self-destructive attractions of the first sense of leadership and its clinging, desperately, to a failing (already failed?) status quo. Δ

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respect. Well, I believe that axiom is still functional and in full operation.

It is a fact of life that when one becomes a dentist he becomes irrevocably identified as a dentist and his personal identification most frequently becomes secondary. This is much like the "good news and bad news" stories. The good news is that when a dentist is truly a good citizen and gives the "much" that is required of him, the entire profession basks in his accomplishments and is honored. But the bad news is that when one of the microscopic minority of dentists strays and errs, the profession also shares in the shame and discredit. I think of an example in Dallas where a non-practicing dentist from Florida was indicted for fraud in a real estate venture. The papers did not read: "John Q. Doe indicted . . ." The papers read: "Dentist indicted . . ." The point is: We are inseparably a part of the profession and what honors one, honors all and conversely, what dishonors one brings a blemish to all.

A number of years ago, the Michigan Dental Association held a Public Relations Seminar. One of the speakers was Glen A. Boissonneault, Editor, Saginaw (Mich.) News. He said that if he were a dentist he would present his shiniest face to the public—to show what solid citizens he and his dentist colleagues were—to show that he was genuinely interested in his and the community's welfare, that he was interested in more than filling cavities and bank accounts. Then he said to the profession, and I quote: "But you have not and you are not. So far as the public is concerned, you all could be members of Anonymous Anonymous."

"And your trouble is, I believe, that you've been devoting all your time to the practice of dentistry and have in many instances overlooked or forgotten the extracurricular practice of citizenship." end of quote.

Mr. Biossonneault described the research he did in preparation for his appearance on the panel.

He stated that at his newspaper there were approximately 250,000 individual library or morgue files containing something in excess of 2,000,000 individual clippings covering everything from fluorides to zinnias, every person in the circulation area who had, in one way or another, made himself newsworthy.

To make certain his community-dental relations

were not unique, he decided to check his findings with other communities. He learned, when his research was over, that his findings could be generalized.

He had the librarian pull the files on the local dental society, on fluoridation, and on every one of the 67 dentists actively practicing in the city, and on two who were semi-retired. He limited his research on the dental society to the past ten years but some of the clippings on individual dentists dated back 40 years.

He stated that during the past ten years 11 onecolumn pictures of incoming presidents were published. He explained that the reason for 11 in 10 years was that one year they goofed and used someone else's picture over the story about the new president and the next day had to correct the error. In addition, during an entire decade, they published exactly nine stories covering such items as a dental technician being arraigned on a charge of illegal practice of dentistry, a Christmas smorgasbord and the very commendable society project of fitting mouthpieces for high school athletes.

The files on fluoridation revealed five stories in which the dental society figured, probably 200 in which dentists did not. The most striking story, he said, was that a citizen's committee had been formed to promote fluoridation—and that committee was headed by a medical doctor!

He was approached during the campaign by a dentist who asked him to recommend someone or some group to head up the campaign. He told the dentist that he could think of no one more qualified than a dentist or the dental society. The dentist answered by saying that the dental society did not want to be publicly identified with what might be a losing cause. The editor conjectured that perhaps this was a statewide policy; if so, he said, it not only represented a lost chance for some positive identification with a worthy—even if lost—cause, but also stamped the dentists, in many people's eyes, as some kind of gutless wonders.

Then his review of the 69 dentists revealed:

Two dentists made holes-in-one, on the golf course.

Two dentists were convicted of game law violations; one had his driver's license revoked by the state.

One dentist became commander of a veterans post, four others became presidents of service clubs such as Kiwanis or Rotary. Another served one term as secretary of a township board of education, another served briefly as president of the Civic Symphony Association.

In all of the clippings covering 40 years he said he found exactly three dentists who had distinguished themselves in any way other than those listed. And the service of two of the three dated back more than 20 years! But these three did more for the profession and their community than all the others combined.

Only three of the 67 active practitioners belonged to the Chamber of Commerce. He scolded the profession saying that they should support the Chamber whose goals were to fight to maintain employment, fighting to bring new business and industry and people to the community. He said he never heard of a dentist getting rich in a city from which all the industry had moved; he never heard of dental bills getting paid by unemployed workers. One dentist who was approached for Chamber of Commerce membership answered that he'd deduct the amount of his membership fee from his United Fund contribution. When the campaign worker made that report he was told that if this person could not differentiate between his economic well being and his community responsibility he wasn't wanted in the Chamber.

Deserved or not, he said dentists have become known as a group who do nothing but practice dentistry. In the public's eye they don't provide community leadership, they don't support community activities with either time or money.

He continued saying that he was aware that many dentists, unlike other professional people, stand on their feet while practicing their profession. He had no doubt that they were tired when they closed their offices at night. But he reminded that the factory worker, the shop steward, the union organizer stands on his feet, too, for eight hours a day but he is found in ever increasing numbers, serving on city councils, school boards, community chests, ringing doorbells for union and community campaigns, fulfilling the responsibilities of community citizenship.

I know that in the intervening years a great deal has been accomplished with respect to dentists and the extent to which they demonstrate good citizenship, and how much they have reduced the amount of time they stand while they operate but Mr. Boissonneault gave us too much truth and too many facts to be ignored. I believe you will agree, however, that the frequency of endeavors in community activities is far less widespread than it should be. Not just as public relations maneuvers for the good of the profession, but as honest-to-goodness individual duties and responsibilities.

The health professional has earned his reputation for being something above average and something special in a number of ways. Surely, his compassionate and tender ministrations are important, but again, this is rightfully part of the "much" to be expected of one who has been given an education above the average and an above-average opportunity to serve people in need and who are unable to serve themselves. The role of a professional servant, however, is only one of the "much to be requireds" from the dentist as a citizen.

The dentist-citizen is obligated to be an active part in the affairs of his community beyond the health affairs. Because of the respect he has generated, his opinions are highly valued. His participation in the quality of life in his city; in the schools, churches, and government is quickly noted and appreciated.

Being active in community affairs in no way lessens the dentist's responsibilities to his family, his country, his church and his Maker.

Of all the segments of the population, I know of none more qualified to be choice citizens and role models than the Fellows of the American College of Dentists. Certainly our world, our Country and our profession desperately need good role models. The recognition accorded the Fellows of the College is a testimonial to their abilities to serve in that capacity. We know that the choicest people in the profession are the ones invited to Fellowship—you and they are the leaders of the profession. We also know that important people, substantial people, principled people, invite imitation. Our College folk are in a remarkable position to set examples in professional ability, integrity and in citizenship. Δ

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Dallas, TX 75214

CAMPAIGN FOR THE 90'S—A Success Story

James A. Harrell, Sr.

I know that in every Fellow's heart he or she believes in the purposes and objectives of the American College of Dentists Foundation:

- (a) To FOSTER and maintain the honor and integrity of the profession of dentistry;
- (b) To STUDY, improve and to facilitate dental health care;
- (c) To PROMOTE the study of dentistry and research therein, the diffusion of knowledge thereof, and the continuing education of dentists;
- (d) To CAUSE to be published and to distribute addresses, reports, treatises and other literary works on dental subjects;
- (e) To PROMOTE suitable standards of research, education communication, and delivery of dental health care.

The whole purpose of the CAM-PAIGN FOR THE 90'S is to provide facilities to carry out these principles more effectively, to provide adequate administrative space and an endowment to help maintain the facilities.

At the 1988 Spring Meeting of the Board of Regents, a professional facilitator lead the Board of Regents through a long range planning session to determine priorities and direction for the College. The first and most urgent need was determined to be ownership of a national facility with adequate space to serve the needs of the College and Foundation.

It gives me great pleasure to report that the Campaign Committee is very enthusiastic about the progress of the capital fund drive. Pledges have been received from 100% of the Officers, Regents and Campaign Committee members. In addition, significant amounts have been pledged by the Leadership Group initially solicited. These pledges include one pledge for \$40,000, 2 for \$25,000, 1 for \$15,000, 3 for \$10,000, numerous pledges for \$5,000 and even more for \$3,000.

The CAMPAIGN FOR THE 90'S is in full bloom now and the goal of \$750,000 is within reach. We must work diligently to inform and encourage every Fellow to make a pledge. Seventy-five percent (75%) of the Fellowship of the College had been contacted by either personal contact, letter or telephone by January 15th. The remaining twentyfive percent (25%) received a second letter reiterating information in the initial letter and explaining that it had not been possible to reach them during the direct solicitation period. Additionally, those that had been contacted, but chose not to pledge at that time, will receive a letter at a later date. This will hopefully complete the solicitation which will have given everyone opportunity to participate in the Campaign.

Why was Washington, D.C. selected as the location of our new home? The Committee for the CAMPAIGN FOR THE 90'S represents an excellent cross section of our membership and was carefully chosen to represent the North, South, West, Midwest and East Coast—the entire United States. At the Steering Committee's first meeting on June 28–29, 1988, the first item on the agenda was the location for the proposed American College of Dentists Foundation national facility. The consultant group selected to advise the Committee on capital fund drive matters suggested that it would be difficult to proceed with the CAM-PAIGN FOR THE 90'S without first designating the specific city where the facility would be located. The Committee studied and discussed locations in many areas of the country and narrowed the choice to either Chicago, Illinois or Washington, D.C.

Without question, Washington D.C. is the health capital of the world. There are over 1200 organizations in the D.C. area that pertain to the advancement of the health professions and auxiliaries, including the National Institute of Medicine, the National Institute of Dental Research, the National Science Foundation and the National Library of Medicine. The Committee felt that the great aspirations of the American College of Dentists Foundation could best be carried out in this atmosphere. It was for this reason that the Steering Committee recommended the Washington, D.C. area as the site for the national facility. Those associated with the CAMPAIGN FOR THE 90'S are confident that a location can be found at a reasonable cost.

I am sure that in their hearts all Fellows would like to be a part of this heroic, historic project. Once this facility is completed or acquired, we will have taken a giant step toward making visible the purposes and objectives of the American College of Dentists Foundation and the American College of Dentists. Δ

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OPPORTUNITIES FOR DENTAL PRACTICE IN A CHANGING

Annual Meeting Panel Discussion

Moderator: Alvin L. Morris

The Future of Dental Practice

James A. Saddoris*



On behalf of the officers and trustees of the American Dental Association, I bring you greetings and best wishes. I'm here today to discuss the future of dental practice in a changing environment. I think you'll agree with me that this future has never been more challenging.

The environment surrounding dentistry paints an interesting picture of our

James A. Saddoris

21st-century destination. We will see interesting shifts in the age structure and socioeconomic characteristics of the American population.

Changes in demographics will influence both society and the economy, and will certainly affect the level and types of dental care demanded.

The American population is aging. By the year 2000, the median age of the population will be 35 years old and the number of adults over age 65 will have risen 30 percent—increasing from 28 to 36 million. By 2040, the number of adults 85 years and older will increase sixfold, rising to 13 million from the present 2.2 million. So, it's a safe bet that within the next few decades, society's emphasis will focus on the concerns and demands of Americans in their middle and later years.

Along with these changes will come changes in the way we view our adult patients, especially those of retirement age.

Factors Influencing Future Dental Practice

Howard L. Bailit*

No one who is at all connected with dentistry and the profession dental would doubt the dramatic nature of the changes which have occurred over the past ten years. In part, these changes have been brought about by global economic and social alterations in the world and in the health care system. Within this context however there are distinctive trends to



Howard L. Bailit

oral health care and its delivery, which make an already complex situation even more turbulent. Within a period of less than ten years tremendous changes have occurred in dentistry in the type of care provided, disease trends, financing patterns, delivery systems for patient services, ratio of dental practitioners to the population, ratio of dental specialists to general dentists and demand for dental education.

As serious and important as these health and dental health changes have been, they have been coupled with a host of broader social changes that have also had a tremendous impact on dentistry and its profession. The current demographic configuration of the nation means a growing percentage of the population will be elderly while a smaller percentage of the population will be comprised of children and adolescents. While this fact is recognized, there has been a

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^{*}James A. Saddoris, DDS, President, American Dental Association. Continued on Page 34

^{*}Howard L. Bailit, DDS, Professor and Head, Division of Health Administration, School of Public Health, Columbia University. *Continued on Page 36*

EDUCATION AND DENTAL ENVIRONMENT

The Impact of Advances in Research

Harald Löe*

Change is in the air.

Wherever we look

-whether at wom-

en's hemlines or at

the occupant in the

White House-fall

1988 finds us facing

change and chal-

lenge on all sides. So

it seems highly ap-

propriate that the

theme of this meet-

ing of the American College of Dentists

centers on the Future

of Dentistry in a

Changing Environ-

ment. The 1980s will



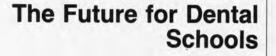
Harald Löe

probably go down in history as a pivotal decade in our profession. Progress in science and the advances in knowledge and understanding are influencing and changing our lives, not only as human beings, but as professionals as well. We can hardly open the daily paper without reading about new conquests of old diseases, new technologies and treatments that promise a further prolongation of life, a steady increase in the life span, and a gain in the quality of life. We are closer than ever before to understanding the fundamental life processes, to unraveling the code of development, and the enigma of aging. Dental research has its share—and a role in these advances.

Last year four NIDR scientists, working in the area of developmental biology, were awarded a \$26,000 prize by a Swiss Foundation for developing an in vitro system for staging cancer tissues and for testing anti-cancer drugs. That research is a direct result of

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The decade of the 1980's will be remembered as a time of significant change in the United States. This is especially true for all components of the education sector of society which has been confronted with many challenges and opportunities. Higher education in particular has come under increased scrutiny, with attention focused, among other



J. Bernard Machen*



J. Bernard Machen

dimensions, upon its quality, cost, relevance, and efficiency. As a component of higher education, dental education is also facing these challenges, just like the liberal arts, the natural sciences, and the other professions. These are difficult times but there also exist some exciting opportunities if the challenges before us can be successfully addressed.

The first step in making a challenge into an opportunity is to recognize the environment in which one exists. It is essential to identify conditions that affect dentistry and to estimate the scope of changes likely to occur either through research or as a part of the broader environment of society as a whole.

The broad environmental issues are real; they are affecting dentistry today, and they either already are or soon will affect dental education. Likewise, the perspective on dentistry, as viewed from the standpoint of how research will change it, can be both

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Contrary to popular stereotypes, persons age 65 and older are better off financially than that group has ever been. Although income falls after retirement, the older adult accumulates wealth throughout the work years. Less than 5 percent of people over age 65 live in institutions; the majority of older adults are homeowners and live in family households.

In fact, the Gerontological Society of America says that the 12 million households of people 55 years and older "are the most affluent consumer group in the country today."

Communicating the need for care to this population group is one of our profession's priorities. Programs like the ADA's National Senior Smile Week campaign are designed to bring our message to this changing population.

But it's not *only* the population of our society that is changing. Disease patterns are also changing, partly because America is growing older and partly because of advances in the art and science of dentistry.

In just the last 10 years, we have seen significant improvements in diagnostics, endodontics, esthetic dental procedures, orthodontics, periodontics, preventive dentistry, fixed prosthodontics and temporomandibular joint therapy.

While the elderly are retaining more of their teeth into old age and therefore the need for complete dentures should in time decrease, the increase in absolute numbers of older persons will mean that routine prosthodontic services will represent a major treatment area for older adults.

In discussing the future of dental practice, there is another change that comes into play—a change in the attitudes of the public. Dentistry's longtime preventive approach dovetails with the new emphasis on "wellness." As people become aware of the importance of dental health to overall health, we may see fear and avoidance of dental treatment become a relic of the past. I believe that fewer and fewer people will cling to the antique notion that dentistry is painful.

And I predict that more Americans will act on the belief—held by 90 percent of them, according to government figures—that it is important to see a dentist regularly.

The generations of the future will understand better than any in history how essential dental health is to looking well, talking well and eating well. They will understand that having good oral health makes life better.

But, as more adults keep their teeth longer, more of them will be at risk to dental disease, caries, periodontitis, and more of them will encounter treatable dental problems.

In fact, experts like Douglass and Gammon predict

that by the year 2000, the total number of hours needed to treat decayed teeth and replace restorations in adults will increase by many millions of hours.

For example, they say that in adults age 35–44, operative dentistry treatment needs will increase to 41 million hours, nearly twice the number of hours needed in 1974—even if caries prevalence continues to decline.

This is because of the increase in numbers of people with teeth and the need to replace restorations an average of once every 10 years.

Dr. Larry Meskin, of the University of Colorado, makes a similar and very interesting prediction. He points out that:

- For every 100 people with teeth, 186 visits to the dentist are made per year.
- For every 100 people without teeth, only 61 visits to the dentist are made per year.

Therefore, more older people plus more teeth means more dental visits.

Dr. Meskin says that disease patterns are bullish for dentistry. His calculations certainly appear to support that statement.

What other changes will we see in dental practice in the decades to come?

I think we all realize that we will probably see less caries in children. I hope we will continue to see community water fluoridation, school fluoridation programs and the use of sealants increase. Based on historical trends thus far, the outlook appears positive.

During the past two decades, the number of persons using fluoridated community water supplies has more than tripled, from approximately 40 to 130 million. The number of children involved in such programs is estimated to have increased twelvefold, from less than one million in the early 1970s to more than 12 million by the early '80s.

We've seen similar progress in the area of sealants. Since 1981, their provision has increased 18-fold, according to the Department of Health and Human Services. Between 1983 and 1984 alone, the number of teeth treated with sealants tripled.

Surely these changes are positive ones. But in the decades to come, we will see other changes as well —changes in the composition of our own professional population.

We will continue to see growing numbers of female

dentists. In fact, the number of female dentists is expected to grow six times as fast as the number of active male dentists for the rest of the century.

In 1987–88 about 5,300 students were womenabout 29 percent of total students. And, if current trends continue, we will see a substantial number of dentists' offspring carrying on the profession of their parents.

I think this has to do in part with the high public respect dentistry enjoys, a respect that has remained intact despite the tremendous changes our profession has confronted in recent years.

The most recent Gallup polls rank dentistry second only to pharmacy in terms of honesty and ethical standards.

That's higher than medicine, law, or even the clergy.

And this will continue as long as we continue to value, and honor, the ethical standards of dentistry, which the winds of time and change can never be allowed to erode.

Quality. Free choice. Access to care. Honesty and collegiality. Professionalism. And most of all, service above self. Dentistry will change in the future, both in ways we can predict and ways we cannot imagine.

But those ethical values will not change. Like the Ten Commandments of old, they are engraved in stone. They are permanent, fundamental and unchanging.

There is one other aspect of our profession that contributes greatly to the respect we enjoy in the public eye. This is our system of education, which is the finest in the world.

Within the future of those educational institutions lies a big part of the future of our profession. The quality of tomorrow's practitioners . . . of research . . . and of continuing education, rests, in large part, with them.

Our dental schools have done a commendable job of responding to changing needs.

They have reduced enrollments in response to these changes by nearly 30 percent in the last 10 years. In 1986, dental schools enrolled about 4,500 first-year students, compared to 6,300 in 1978, when first-year enrollments hit their peak.

By the year 2005, it is predicted that only about 3,700 graduates will be leaving our dental schools. Meanwhile, we will continue to use the select program to bring the brightest young students to our profession.

In the future, as in the present, the dental schools must have flexibility, so that enrollments may rise or fall in response to need.

Equally important, our dental schools will need better funding to pursue research, scholarships, and the very best technology and equipment. Now, and in the future, dental schools will rely on their alumni to provide the dollars needed to keep our professional programs at the cutting edge of excellence.

New technological developments are among the most exciting aspects of the future of our profession.

Looking ahead, we see new and improved methods of detecting periodontal disease and development of anti-plaque agents that will improve prevention and treatment.

Better restorative materials will expand our treatment options and may even increase productivity. And the use of lasers to prepare teeth for restorations will surely speed and increase our precision.

Technical improvements will be made in x-ray equipment to reduce patient exposure to ionizing radiation. And we may see new developments in alternative diagnostic techniques, such as thermography and the use of fluorescent dyes to detect caries. The transfer of technology from research labs to the treatment room will continue to be a high priority.

The ultimate outcome will help us fulfill more completely than ever before our obligation of service to the public.

It is an exciting time to be a dentist and in the future, it will be even more exciting. The opportunities for service to our profession and to humanity are limited only by our imagination. Let me quote the late Robert F. Kennedy in expressing my thoughts:

"You are living in one of the rarest moments in history—a time when all around us the old order of things is crumbling and a new world society is painfully struggling to take shape.

"If you shrink from this struggle and the many difficulties, you will betray the trust which your own position forces upon you. You live in the most privileged nation on earth. You are the most priviledged citizens of that privileged nation; for you have been given the opportunity to lead....

"You can use your enormous influence and opportunity to seek purely private pleasure and gain. But history will judge you, and as the years pass, you will ultimately judge yourself, in the extent to which you have used your gifts and talents to lighten and enrich the lives of your fellow men.

"In your hands lies the future of your world and the fulfillment of the best qualities of your own spirit."

So I implore you to live up to Robert Kennedy's challenge. When all is said and done, the future of dental practice begins with you. Δ

Reprint requests to:

Dr. James A. Saddoris

American Dental Association

²¹¹ E. Chicago Avenue

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failure to fully assess the impact of the baby boom bulge moving through middle age. The national economy is rapidly changing from the balance between manufacturing and service to one dominated by the latter. The economically difficult years following the oil crisis of 1973 has been succeeded by a long period of business expansion and low rates of interest and inflation. Which of these economic scenarios will hold for the future seems uncertain. Part of the dramatic rise of the service sector of the economy has been driven by the ever-growing capacity to produce new science and technology at a faster rate. These alterations in the very fabric of our society are by no means limited to those matters measured by the demographer, scientist or economist. There are, as well, just as important, and perhaps more fundamental shifts occurring in our prevailing cultural values. Women in the work force, men on the home front, relationships between professional and patient or client, the litigious nature of many involved in these relationships, the growing "corporatization" of our experiences, and a growing prominence of privatization in concert with the deterioration of a governmental presence in our public lives and decisions all make for a world very different from just twenty years ago.

As the 21st century approaches, the dental profession is again faced with challenges to some of the basic assumptions underlying the present system for educating dentists and delivering care. The marked reduction in the incidence of caries and the development of more effective therapies are examples of changes that are likely to have a fundamental impact on dentistry.

It is one thing to realize that changes are taking place, but another to know what to do about it. Where should dentistry be headed, and how should it get there? There are no obvious answers to these questions. Certainly, there is no consensus within the profession, and the visions of the future published by so-called "dental futurists" are not particularly convincing.

This lack of professional consensus is not surprising. After all, we are in the middle of a period of rapid change. Under these conditions of uncertainty, the wisest course of action may be cautious experimentation with new forms of education and practice. The genius of the American educational and practice system is its heterogeneity. No government agency or central academic body dictates policy to all schools. Within limits, each school has the power and flexibility to move in directions that it believes will best meet the needs of students and the profession.

FACTORS INFLUENCING FUTURE DENTAL PRACTICE

The American people have never been in better oral health. In the last 20 years we have experienced a dramatic reduction in several oral diseases. History will record this decline as one of the great achievements of preventive dentistry.

The decline in tooth decay in children is welldocumented. In a 1980 national survey, 12 year old children averaged 2.7 DMF teeth and 37 percent of children, ages 5 to 17 years, were caries free. To gain some perspective on these data, the World Health Organization has called for an average of 3 DMF teeth for 12 year old children by the year 2000. The United States has already achieved this goal, and further reductions in caries can be expected, as a larger percentage of children are exposed to topical and systemic fluorides and sealants.

Indeed, the day may come when caries is no longer a major public health problem. Whether this day is reached will depend on how we deal with social class differences in tooth decay. Caries is now more prevalent in children from lower income families.

The impact of fluorides and other preventive measures on adult oral health has yet to be determined. Clearly, substantial improvements can be expected as cohorts of children with minimal decay reach adulthood. This suggests that adults may have fewer restored and extracted teeth than they had in the past. Definitive data on adult dental health will soon be available from an NIDR funded national study.

The most recent national survey of periodontal health is about 15 years old. Based on these data and a few regional studies, about 22 percent of adults have periodontitis and another 30 percent have varying levels of gingivitis. For most people with periodontitis only a few teeth in one or two quadrants are affected. Some data suggest that the prevalence of gingivitis is decreasing, whereas periodontitis has remained constant.

Periodontal diseases are also concentrated in lower socioeconomic class groups and the elderly. For example, one study reported that only five percent of nonaged adults in the upper third of the education distribution have periodontitis.

The percentage of the adult population that is edentulous is declining. From 1962 to 1974 the percentage dropped from 17.0 to 14.7 percent. When the full effect of the reduction in caries is seen in adults, the prevalence of edentulousness can be expected to drop dramatically.

The dental delivery system can be divided into four primary components: financing mechanisms, systems of provider payment, organizational settings, and personnel.

The growth of dental insurance is the most important change in the financing of dental care experienced in the past 20 years. About 100 million Americans have private insurance coverage and another 20 million are enrolled in public insurance programs. The period of rapid expansion of private insurance appears to be over. The population without coverage are mainly the self-employed, part-time employees, retirees, and people working in small firms.

Since the 1970's, there has been a rapid expansion of the number of dentists and physicians, exceeding the annual growth rate of the population by a factor of 2 or 3. From the perspective of the professions this has led to a substantial dentist and physician surplus. Along with the economic recession of the late 1970's and early 1980's, this resulted in the decline of the uninflated income of dentists (and physicians). In dentistry this is believed to be a primary factor in the marked reduction in the number of applicants to dental schools and a corresponding drop in the number of entering freshmen. In just 10 years about 1,700 first year positions were eliminated. Based on conversations with the American Association of Dental Schools, the decline in the applicant pool is continuing. Now, the growth of the population is expected to exceed that of dentists in the 1990's.

Also relevant is the retirement age of dentists and the greater numbers of women entering the dental profession. The age that dentists retire from practice may be declining. Also, with the increasing problems with malpractice insurance, fewer older dentists may find it financially rewarding to practice on a part-time basis. If this is true, the problem of "excess" dentists may be resolved sooner than expected.

IMPLICATIONS: DEMAND FOR DENTAL CARE

It is commonly assumed that the decline in tooth decay will lead to a reduction in the demand for dental services. Since general practitioners spend about 75 percent of their time treating caries of its sequelae, this appears to be a reasonable assumption. Indeed, as caries declines so will the demand for restorative services.

But this does not mean that there will be an overall reduction in the demand for dental services. Many other factors besides the incidence of caries and, more generally, oral health status, affect the demand for care. Paradoxically, oral health status is not a particularly good predictor of utilization. *Indeed, dentistry is one of the few health services where the sickest people use the fewest services*.

A second reason that the demand for services might increase as oral health status improves relates to fewer people having teeth extracted and becoming edentulous. The edentulous have very low rates of utilization. So, as their numbers decrease, demand should increase.

Overall, the sociodemographic trends indicate an increase in the demand for care. Only 30 to 35 percent of those above age 65 now visit a dentist one or more times per year. This is about half the rate of nonelderly adults. In large part this is because elderly who are edentulous visit dentists very infrequently. In contrast, those with teeth see the dentist only slightly less than nonelderly adults. Since the percentage of elderly that are edentulous is declining, their utilization rates can be expected to increase.

In addition to more teeth, the elderly will be more affluent and educated than in the past. This should also increase their demand for dental care. The decline in dental graduates will probably continue for several more years. Eventually, this will lead to an increase in demand relative to the supply of dentists. Growth in the number and duties of dental auxiliaries could have the opposite effect. Whatever happens, changes in the supply of dental personnel will have little impact on the demand for care in the near future. With over 130,000 dentists in practice, 500 fewer or more graduates now will make minimal difference on the demand for care until well after the turn of the century.

In summary, the forces leading to increased demand are probably greater than those causing demand to decline. This tentative conclusion is time dependent, and only refers to the next 25 years.

IMPLICATIONS: CONTENT OF DENTAL PRACTICE

CONCLUSIONS

For the more immediate future, there is some reason to believe that the demand for dental care may soon begin to increase faster than the supply of services. This should lead to a more prosperous profession and eventually, more applicants to dental schools. Whether it makes sense for schools to expand their class size is another matter.

In terms of the content of practice the present focus of dentists on the mechanical/surgical repair and replacement of teeth is slowly declining. In the future, fewer people will need these services, and for those who require treatment effective noninvasive options may be available. By the same token, effective dental care is certain to be more dependent on an indepth knowledge of the basic chemistry and biology of oral structures and their environment.

With respect to the environment of dental practice, changes in financing, payment, and organizational arrangements are occurring and could eventually lead to a very different delivery system. Certainly, this is happening in medicine. The extent to which dentistry will be affected remains to be seen.

Although the next several years are likely to be anxious times for many dentists, my guess is that solo, fee-for-service, dentist owned practices will continue to be the predominant delivery form for many years to come.

From this short-term analysis certain broad trends are evident that may have long-term implications for the practice of dentistry. In 50 years or so, the great majority of Americans will be in much better oral health with minimal decay, periodontitis, and missing teeth.

What will dentists do in this new environment? Will new diseases or conditions arise that require treatment? Unless these are new infectious diseases of systemic origin, this seems unlikely. Will dentistry move into new areas, treating conditions that are now under the control of physicians? With the coming physician glut that may last well into the 21st century and the ensuing professional territorial battles that are sure to develop, this scenario also appears improbable. Perhaps, dentists will continue to treat the same conditions as now, but there will be fewer dentists. After all, caries, periodontal diseases and missing teeth will not disappear entirely; some people will always need treatment for oral problems. Of these options. I find the last one somewhat more convincing.

To conclude, although this analysis does not predict the demise of the dental profession, we do not have the luxury of being complacent. Dentistry is undergoing changes of historical importance. Admittedly, we do not have a clear picture of the future, but, I submit, the outlines are visible. Now is the time for leaders of the profession to join the debate and to begin cautious experimentation with new methods of education. Thomas Huxley, the famous English evolutionary biologist once said, *"The great end of life is not knowledge but action."* Δ

Reprint requests to: Dr. Howard L. Bailit School of Public Health Columbia University 600 W. 168th St. New York, NY 10032

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I believe this is borne out both by the just-com-

OPPORTUNITIES FOR DENTAL EDUCATION IN A CHANGING ENVIRONMENT

Löe Continued from Page 33

pioneering studies of basement membranes begun by NIDR in the 1960s. Basement membranes are collagen-rich tissue components that separate organs of the body and surround blood vessels and nerves. They are important in embryonic development, in maintaining tissue organization, and in promoting tissue regeneration, and they are altered in the course of inflammation and in conditions such as diabetes and kidney disease. The NIDR scientists have now shown that for cancer cells to metastasize, they must degrade the membrane and break through. In this way they gain access to the bloodstream and to other organs. In the course of these studies the researchers discovered a unique basement membrane protein called laminin and identified its very special role in cancer metastasis. This has led to the design of experimental drugs to block cancer metastasis.

From collagen to anti-cancer drugs in 20 years is no mean feat.

I cite this example not only because of its timeliness, but also as an indication of the extent to which dental research has become a part of mainstream biomedical research. Our investigators bring the same expertise in cell and molecular biology to the study of oral tissues as others are bringing to the study of other cells and tissues of the body.

At the same time, we are witnessing spectacular progress in the more traditional areas of the clinical sciences. In America, 40 years of investment in fluoride research has paid off dramatically. Almost 50% of American school children under 17 are caries free; never had a cavity, never had a filling. And those who still have caries have much fewer and smaller cavities than they did even at the beginning of this decade. Caries-a disease more common than the common cold-is for the first time in the history of mankind on a decline.

However, dental research holds the key to even more dramatic improvements in oral health world wide. I say that not because I am an administrator of a research institute, but because of what I, as a clinician, see happening in the field today. I believe we can look forward to a time within the next 3 to 4 decades when not just young people, but middle-aged and older Americans, need never lose a tooth to disease.

pleted study of 40,000 schoolchildren across the U.S. that I referred to, and the National Survey of Adult Dental Health in the U.S., which included oral examinations of 21,000 working adults-factory employees, white collar workers and government personnel--who were seen at work sites throughout America, and older individuals who were examined at senior citizen centers.

The data show a profound improvement in oral health in America; an enormous change compared to a generation ago.

Only 4 percent of the working adults were edentulous. Half had lost, at most, one tooth. They averaged 23 decayed or filled tooth surfaces; 95 percent were already filled. Root caries was found in about 20 percent of the individuals. However, there was less than a single decayed or filled root surface per person. And close to half the root lesions had been filled.

The periodontal health of these working adults was also impressive: While gingivitis was prevalent, and most had some loss of attachment, less than 2 percent of the periodontal pockets had a depth greater than 5 mm.

Of those 65 and over, 42 percent were edentulous. While this is a substantial fraction, it is significantly lower than a generation ago. Caries was comparable to what we found for the working adults. However, root caries was more of a problem in the elderly, with 63 percent showing decay, and with an average of 3 decayed or filled root surfaces per person.

The prevalence of gingivitis was about the same as in the adults, and 4 percent of the periodontal pockets were deeper than 5 mm.

We are fine-tuning our analyses to provide a sharper profile of oral health status by age, socioeconomic level, education, and so on. Nevertheless, I am convinced that what we have here is evidence of a significant gain in the oral health of the American people.

So, what does this mean in terms of the impact of dental research on dental education and practice in the future?

First, we must realize that dental research only really began to develop after World War II. It had taken all the previous century to move dentistry from pain relief and exodontia to restoration and repair.

In the 1940s and 50s dental research entered a second phase, first with the work on fluorides and new materials, then with the discoveries of cariescausing bacteria; and next, the causes of periodontal diseases. At the same time, the general level of education and health was improving, systemic and topical applications of fluorides were begun, and we reached a state where virtually everybody bought and used a toothbrush. So what research was discovering about the cause and prevention of disease was being amplified through better oral hygiene practices, better understanding by the general public, and, of course, by the rapid adoption of the results of research by the practitioners themselves.

Now, dental research has entered a third phase, one in which we can expect to see a continued expansion in scope and depth, and an accelerated impact on the prevalence and severity of oral afflictions in our people.

With respect to caries and periodontal diseases, we are going to go after the the high-risk individuals, the people who are more susceptible and will require special care or early intervention.

Diagnostic research is growing by leaps and bounds. Investigators are perfecting techniques for three-dimensional radiography—CAT scans of the mouth. Digital subtraction radiography, nuclear medicine techniques and genetic probes are already moving into clinical application, and, along with magnetic resonance imagery, will enable earlier and better diagnoses of periodontal and soft tissue disease.

The era of sealants and composites is upon us, and composites for posterior teeth will be commonplace. Bonding to dentin will be routine. Implantology has come of age. Oral ecology, including virology and the study of yeast as they relate to soft tissue diseases are increasingly coming under research attack—partly spurred by the crisis of AIDS. A vaccine against oral herpes will soon be ready for clinical testing.

As many of you know, there is considerable interest in isolating and purifying a bone growth factor which could be used to fill bony defects and induce and accelerate new bone growth. Once this protein has been sequenced, biotechnology methods could be applied to produce the factor in abundance.

These new avenues of dental research owe much to the revolution in biotechnology. We are now able to apply recombinant DNA and monoclonal antibody techniques to the study of oral pathogens and to generate harmless mutant forms to replace virulent organisms. We are using protein sequencers and other automated equipment to expand our knowledge of salivary proteins. Well, I don't want to use all of my time citing examples. I do want to impress upon you, however, that I believe that these developments reflect a certain inevitability in the growth of science, in which each new discovery contains the germ that seeds the next advance. Thus, by viewing the current scene, the only conclusion I can come to is that the impact of research on our profession over the next decade will lead to profound changes in the practice of dentistry and in the preparation of young students for that practice.

As I have already told you, not only are we seeing and will we continue to see changes in the patterns of dental disease and in services provided, but also we are seeing changes in the applicant pool and enrollments in dental school. Furthermore, all these changes are occurring amid changes in the demographic makeup of American society.

Forces set in motion in the 1950s and 60s led to the building of new dental schools and to increases in class size. Dental education remained in that mode until 1980 when total dental school enrollment reached 22,842. That proved a breaking point.

Clearly, dental education was obedient to Newton's law of inertia (i.e., a body in motion tends to stay in motion unless acted upon by an external force). By 1980 there were 126,000 practicing dentists in America—almost 20 percent more than in 1960. The ratio of practitioners to population also increased—from 49.5 to 55.5 dentists for every 100,000 persons—in the same 20-year period. The population of dentists was obviously growing at a faster rate than the general population. Also since 1978, expenditures for dental services, adjusted for inflation, have been almost level. Whether as a function of that, or by coincidence, enrollments have been declining steadily since 1980. Last year total enrollment—17,885—was 22 percent lower than the 1980 high.

It is difficult to know what precisely caused the precipitous decline in enrollment, but evidently the college graduates who might have looked to the health professions for their future, were looking elsewhere. Cultural forces probably played a role here. During the 70's, science had lost some of its appeal and law or computers or business became more attractive. Whatever it was, the dental school applicant pool began to decline and the academic profile of the applicants changed.

Once these realities came to light, the dental schools behaved quite rationally. Most strove to maintain standards of excellence. The grade point averages

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in 1987 were on the order of 3.0-neither as low as they had been during the 1960s nor as high as the 3.27 achieved in 1976.

So I am not worried about the caliber of students today. Moreover, with the steps taken by educators we appear to be moving toward stabilization in the ratio of dentists to population. No, the real question is whether the schools will provide future practitioners with the appropriate education, one that will prepare them not just with the latest tools and techniques, but with the knowledge and the intellectuality that will keep them moving with the times; able to adapt to the changes in dental practice that are happening right now, as well as the changes to come.

Filling of cavities will cease to be the mainstay of primary care practitioners such as general dentists and pedodontists. The need for professional preventive services will grow in importance. The decline in caries will reverberate in other areas of practice as well. The need for endodontic care should go down. The need for removable prosthodontics as we know it will decline or disappear as a result of more teeth being saved. In their place will be fixed prosthodontics and implants substituting for single or multiple tooth loss.

Young people reaching maturity and middle age today are in far better oral health than their forebears. There is every reason to believe that they will want to continue to maintain good oral health and that the specter of becoming toothless in old age is unacceptable to them. Indeed, even the oldest groups we are seeing today are healthier than their age-mates a generation ago.

On the other hand, "rumors of the death of dentistry are slightly exaggerated." There will always be a need for dentists. But they will be a new breed of practitioner with a deeper, broader biomedical preparation. They will be expected to have superior manual skills in order to render complex restorative and prosthetic treatment. Their competence must be extended to the diagnosis and treatment of all the oral diseases-including caries, periodontal diseases, oral cancers and pre-cancerous lesions, chronic orofacial pain, temporomandibular joint problems, salivary gland dysfunctions, disorders of taste and smell and swallowing.

More internal medicine, more clinical pharmacology, will be necessary in order to manage clinically the increasing number of patients with systemic disorders who are taking multiple medications. These

skills are also going to be increasingly important in treating older patients. This more expanded approach to dental practice will also demand new levels of sophistication in communication skills and in clinical decision making.

Preparing dental students for this future is one of the most exciting tasks we face today. But we can do it. We have only to think of the history of the profession. We started out 150 years ago pulling ourselves up by the bootstraps. There were leaders then-those who spoke for quality education, the skilled and caring practitioners, the first researchers. They were the pioneers who began to move dentistry from a trade to a profession.

Over the years we have seen how dental school curricula have become integrated with the medical schools-at least in the basic sciences. The result of these evolutionary changes is evident today in the competence and professionalism of modern practitioners. What I suggest is that we continue the evolutionary process: Enrich the learning programs so that we are more than ready to meet the demands of the 21st century.

In the past I have spoken of the triad of research, education, and practice as dynamic elements-comparable to a mobile. Stir one part and the whole is immediately set into graceful motion. This is the dynamic equilibrium of dentistry-and the reason for our spectacular success in the past.

My hope is that we will see the emergence of new models of dental education, geared to the increased tempo and mode of contemporary dental research and able to prepare dental practitioners for the next millennium. I say this fully aware that it is generally easier to move a graveyard than to change dental school curricula! However, there are signs of changes; there are enlightened leaders in dentistry and there are innovative dental schools today, schools that are awakening to the challenges of preparing the new breed of dental professionals: men and women who are living proof that dentistry is no longer an art-it is a science! Δ

Reprint requests to:

Dr. Harald Löe, Director Bldg 31, Rm 2C39 National Institute of Dental Research/NIH Bethesda, MD 20816

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stimulating and frightening. These anticipated discoveries for the most part are realistic possibilities for our future and, therefore, are opportunities that dental education must consider.

It is important to acknowledge that for several years, dental education was only "reacting" to the various issues and forces. "Reacting" is the appropriate word because many of the media articles about dentistry describe what must be characterized as secondary reactions to external environmental conditions. The closures of Georgetown, Emory, and Oral Roberts Dental Schools are reactions. The decline in dental school enrollment is a reaction. These kinds of responses have been highlighted by the media, and some people mistakenly assume these reactions are the only things dental education has been doing during today's turbulent and changing times.

This perception is no longer accurate. For the past two years, dental education has been working to get off the defensive, out of the reactive mode, and become more proactive. This has been addressed through a series of strategic planning initiatives stimulated, and in some cases sponsored by, the PEW Memorial Trust of Philadelphia, Pennsylvania. Dental educators have been assessing opportunities for change and developing plans to move forward into the twenty-first century. Dental education is trying to shed the negatives associated with the recent past and take advantage of the real opportunities that exist to shape the future in the context of changing conditions. Today there is much positive activity in dental education and there is reason to have enthusiasm and optimism for the future. This presentation suggests one approach to meet the challenges and turn them into opportunities.

The essence of this strategy is that dental schools can and should develop a four-fold mission to succeed in the twenty-first century. The four components of that mission are: teaching, research, patient care and service and each component presents unique opportunities that dental education should address. This is not the specific strategy for every dental school because each institution must define its future mission in terms of its own strengths and its own environment. Nevertheless, most schools are moving in some or all of the teaching directions to be presented.

Teaching

The teaching mission is, for many people, the only recognized activity identified with dental schools. That is very understandable because dental education for the last 50 years has placed primary emphasis upon producing dentists and other dental personnel. The manpower shortages that existed 25 years ago made it possible, and perhaps even necessary, for many schools to concentrate solely on the production of dental manpower. However, current and projected manpower and population demographics suggest that dental education cannot exist with just a traditional teaching mission.

This does not in any way abdicate or depreciate the role of dental schools in teaching. In fact, schools must do a better job than ever in preparing practitioners for the twenty-first century, but teaching as a singular mission will probably not be a sufficient reason-for-being.

The future focus on dental education from the teaching perspective will be to provide the broadest possible education in general dentistry. One of the real strengths of the profession is that it is primarily composed of general practitioners. This focus will remain. However, practitioners will almost certainly receive more than a four year education before they enter general practice. There are several trends being identified-a fifth year of dental school, a post-DDS residency, a required internship prior to licensure. These mechanisms are arising in response to a demand for better trained dentists. The new breed of practitioners will have deeper, broader biomedical preparation. There will be more emphasis upon diagnosis, internal medicine and pharmacology. The dental graduates of today are better prepared than the dental graduates of 25 years ago but the future necessitates even better preparation and it is the responsibility of dental education to provide the additional education.

What about graduate specialty education? Do we need new specialties? Do we need the existing specialties? Results over the last several years of the ongoing recertification process for the specialties clearly indicate that changes, if they are needed in both the types and numbers of specialists, will not occur through organized dentistry. Dental education will need to address this matter. It is an opportunity to examine the interface between generalists and specialists and to provide the dental manpower needed to take care of the public in the twenty-first century.

Another aspect of teaching has been the traditional role of dental schools in the education of auxiliary manpower. The dental profession is facing a crisis with regard to dental auxiliary manpower and the resolution of this crisis will involve all components of dentistry. The proper role for schools of dentistry is not entirely clear. There should be close cooperation with community colleges, state boards of dentistry, and organized dentistry to help resolve this crisis. Somehow dental education must assist in solving this problem while simultaneously adapting and changing its overall mission.

It should be emphasized again that teaching will continue to be a very important role for dental schools. However, it is increasingly apparent that dental schools cannot exist solely for education. If the mission is too narrowly defined, dental education will not be a viable component of higher education in the twenty-first century.

Research

Dental schools should develop a significant research mission. All dental schools are part of major universities, but unfortunately many schools have only been affiliated with, as opposed to being integral components of, the university.

The higher education community in our country has the basic mission to perform the research necessary to generate the new knowledge that is critical to the progress of our society. The research universities are increasingly expected to play a primary role as the source of the intellectual capital that is necessary to build and sustain the strength and prosperity of America. University presidents are telling their dental schools that they must contribute to the research mission of the university. This is not just an opportunity for dental education. This is a mandate. It may be hard for some to accept this as one of the foundations for dental education in the future, but it is no longer a debatable point. It is something we must do to an extent far greater than we have in the past.

Even though this is a mandate, it is also a very positive opportunity for dental education and for dentistry. By requiring dental schools to be integral contributors to the research mission of the university, the university is ensuring that in the twenty-first century, dental education will be a positive force for society.

The need to expand our research activity necessitates a number of changes in dental education. Dental faculty must have a background in research. Twenty years ago, one could obtain a position in academics with only a DDS degree, but the advice being given was that to succeed it was desirable to obtain a master's degree and do research in the form of a thesis. Today a full-time academic appointment cannot be obtained at most dental schools unless one has training beyond the DDS level in both clinical disciplines and research.

Young men and women who want to enter dental education are enrolled in advanced education programs of three, four, five and even six years duration after completing dental school. They are obtaining both clinical and research training. One of the biggest challenges and opportunities for dental education is to restructure itself to accept and nurture these young people. This is not going to be easy, but it is vital to the future.

Some in the profession are expressing concern that an increased emphasis upon research weakens and damages the education programs. It should be recognized that the overwhelming majority of current dental faculty are primarily clinicians. The next few years require careful recruiting of faculty with research skills as well as clinical practice and if this is carefully done, it will not disrupt the balance in dental schools. It will only broaden the overall competence of our faculties. The relationship between research and teaching is a positive one. It will enhance the quality of the teaching activity in the years ahead. It is not an either/or situation. This is a symbiotic association that will, in fact, work to the advancement of dentistry.

Patient Care

A third major opportunity for dental education is in the area of patient care. This is not about student clinic care although great strides are being made to improve the process and outcomes of patient care delivered in our student clinics. Today in several areas of the country, dental schools are being asked to provide care to currently underserved patient populations. In the future, a dental school also can be a provider of specialized patient care of the type that is

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not generally available in the private sector. This is patient care that leads to advances in science and technology, which many disciplines badly need. Examples include: temporomandibular joint diagnosis and treatment; implants, including the prosthetic reconstruction of patients who receive implants; comprehensive care for the handicapped; special patient care for the frail elderly and geriatric populations; complicated restorative dentistry involving new materials; and the provision of patient care for the infectious diseased patient, including the AIDS patient.

A dental school can include in its mission the provision of patient care for many types of patients. We can occupy a position in the dental care system similar to what the university hospital does in the medical care system. Practitioners should not see this as competition. This specialized patient care is the type that practitioners do not want to provide or cannot provide in the private practice environment. This type of patient care should be seen as a partnership between private practice and the dental school.

Service

The fourth major area of opportunity for dental education in the changing environment of the future is service. This term means many things. First of all it means service to the profession in the form of continuing education. The practicing dental profession is today experiencing major changes in science and technology. Dental schools can assist with the implementation of these changes. They can serve as the catalyst to assist today's practitioners to make the necessary changes in science and technology. Many people are disturbed about the lack of quality in the continuing education being offered today. Much of continuing education contains too little science and too much showmanship. Dental schools can assume a role in providing continuing education to the profession. We should serve the profession in a manner similar to the way the Agricultural Extension Service of a state university serves the farmer. This is not something we should do simply to make money for the school. Continuing education should be as important to us as teaching, research, and patient care. Indeed, I would propose that continuing education not be a for-profit activity. However, to accomplish this mission schools will need institutional support.

We can develop new formats for continuing educa-

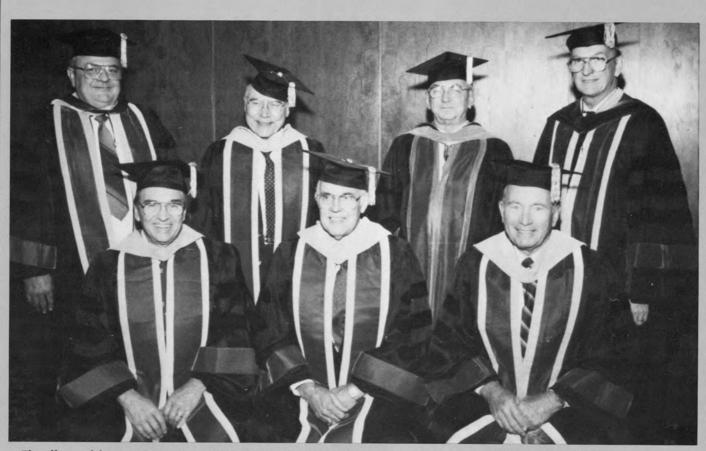
tion—mini residencies, participation courses at the schools, participation courses in the communities. We should be involved in the mastership activities of the Academy of General Dentistry. It appears we dentists are being forced to recognize what has been commonly accepted in every other vocation—that times change and it is, therefore, necessary for the practice of dentistry to also change. The average worker in America changes jobs seven times in the course of his or her working life. For the past 30 years, we in dentistry had it too good and some mistakenly believed nothing would change. It is certainly appropriate for dental education to help the profession accommodate and respond to changes, and I would argue it is incumbent for dental education to do so.

The service mission also includes a responsibility to help the public understand what changes are coming and to assist the public to make decisions that will improve the oral health of society. How can society get the most benefit out of the limited number of public dollars devoted to oral health? This requires both direct and indirect involvement in public health programs by dental education, which is currently an under-represented activity of most dental education programs.

This presentation has presented a four-fold mission in the future for dental schools. It is represented as the four legs of the academic stool—teaching, research, patient care and service. This is a most exciting future. The opportunities are many. It should also be clear that this view of the future will be difficult to achieve. Dental schools are having a difficult time changing their mission. They need the support of the profession in order for this to occur, but if it is forthcoming then they can succeed. The beneficiary of this change will not just be dental education. It will include the dental profession. It will include society as a whole. Dental education needs the support and the understanding of the dental profession, and especially the American College of Dentists. Δ

Reprint requests to: Dr. J. Bernard Machen School of Dentistry University of North Carolina Chapel Hill, NC 27599-7450

1988 Convocation-Washington, D.C.



The officers of the American College of Dentists for 1988–1989: left to right, seated, are President Elect W. Robert Biddington, President James A. Harrell, Sr., and Vice President Robert E. Doerr; standing, left to right, are Treasurer Robert C. Coker, Editor Keith P. Blair, Immediate Past President Robert W. Elliott, Jr. and Executive Director Gordon H. Rovelstad.



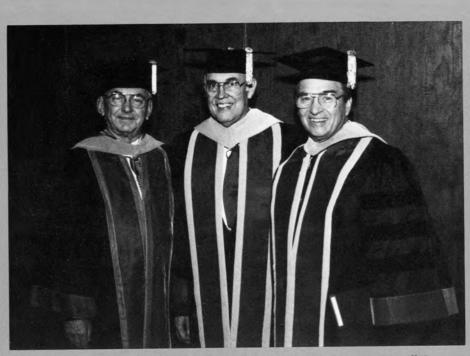
Flag Bearers George W. Young, left, and Joseph R. Salcetti get ready to march.



Mace Bearer Aida A. Chohayeb



Torch Bearer Roger W. Triftshauser



Immediate Past President Robert W. Elliott, Jr., left, President James A. Harrell, Sr., center, and President-Elect W. Robert Biddington.



Convocation speaker, Marine General P. X. Kelley



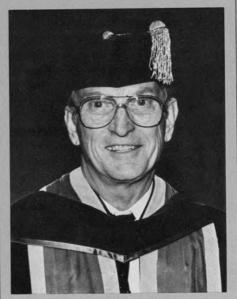
Assistant Marshal Chris C. Scures leads the Convocation Procession.



Marshal Robert E. Doerr directs the procession



Israel Shulman gives the Invocation.



Executive Director Gordon H. Rovelstad

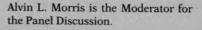


President Robert W. Elliott, Jr., right, presents the Gies Award to Carl A. Laughlin.





James T. Jackson, Chairman of the Metropolitan Washington D.C., Section that hosted the Washington Meeting, welcomes those attending the Luncheon.



Vice President W. Robert Biddington, Chairman for arranging the morning panel discussion, introduces the panelists.



Robert J. Flinton presents the orientation information.





Henry J. Heim, Chairman, directs discussion at the Section Representatives Meeting.



Incoming President James A. Harrell, Sr., addresses the morning assembly.



New Fellow, Ronald C. Packard and wife, Jean. Dr. Packard is a U. S. Congressman from California and the only dentist in The Congress.



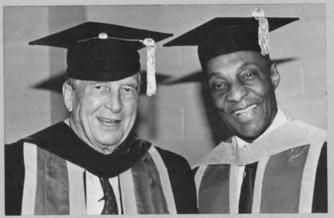
President Elliott congratulates Dr. Lois K. Cohen who was awarded Honorary Membership in the College.



President Elliott congratulates Dr. Clifton O. Dummett who received the Salute of the College for his work in writing the book on the Hillenbrand Era.



President Elliott presents the Award of Merit to Mr. E. B. Tarrson.



Happy recipients of awards, Gies Awardee Carl A. Laughlin, left and Clifton O. Dummett who received the Salute of the College.



New Fellows and their sponsors at the Convocation.



President Elliott, left, greets each new Fellow at center stage during the Convocation.

Section Representatives Meeting



Regency 1 Representatives



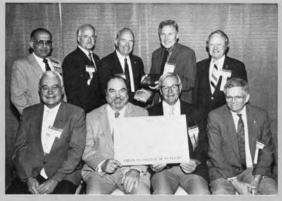
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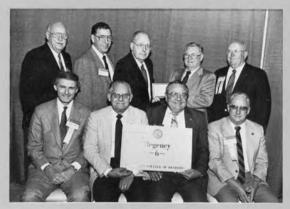
Regency 3 Representatives



Regency 4 Representatives



Regency 5 Representatives



Regency 6 Representatives



Regency 7 Representatives



Regency 8 Representatives

Dinner Dance



ADA President James A. Saddoris and



President Robert W. Elliott, Jr., and wife, Carolyn, wave to applauding crowd as they lead VIP's to the head table.



The United States Marine Band plays rousing Marches to open the evening activities at the Dinner Dance.



Dr. Carlton H. Williams of San Diego, President of the Federation Dentaire International, addresses the large crowd at the Dinner Dance.



President Elliott goes out in great style in his closing remarks at the end of his term.

FACES IN THE CROWD











SPRING 1989

















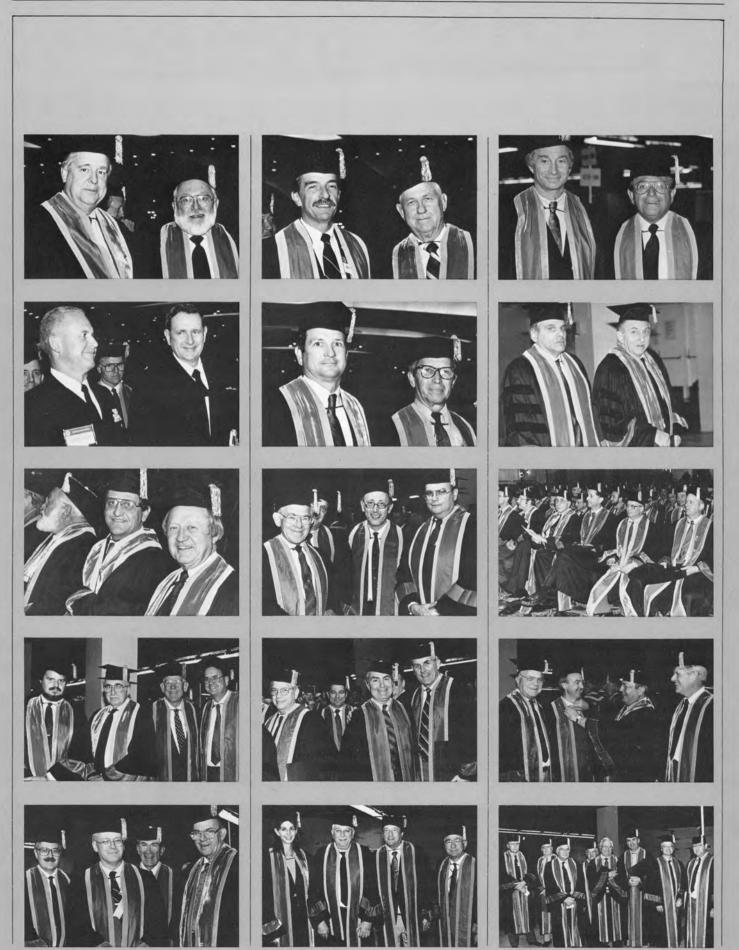




Photos by Edward F. Leone

FACES IN THE CROWD

Photos by Edward F. Leone



Photos by Edward F. Leone



Stanley J. Antonoff was recently elected a trustee of Landmark College, Putney, Vermont, which is the only college in the nation devoted exclusively to the education of Dyslexic students. Dr. Antonoff is a Clinical Professor of Fixed Prosthodontics and Occlusion and Director of the Learning Disability Program at the New York University College of Dentistry.



Stanley J. Antonoff Edward C. McNulty of New York, was recently installed President of the New York Academy of Dentistry. A past chairman of the New York Section of the College, Dr. McNulty is also past president of the Greenwich Connecticut Dental Society and sits on the Board of Directors of the William Gies Foundation for the Advancement of Dentistry.



Edward C. McNulty



Philip J. Boyne

Philip J. Boyne, Chief of Oral and Maxillofacial Surgery at the Loma Linda University, was recently honored by being presented the Distinguished Alumnus Award by Colby College in Waterville, Maine. Dr. Boyne served in the Navy and was Director of the Dental Research Department at the Naval Medical Research Institute. He also saw two tours of duty in Vietnam. Dr. Boyne left the Navy in 1968 and served as Chairman of the Oral Surgery Department at the University of California Los Angeles School of Dentistry and later as Dean of the Dental School at the University of Texas Health Science Center at San Antonio. Dr. Boyne is the author of more than 100 scientific papers, and served as the President of the American Board of Oral and Maxillofacial Surgery in 1982.

Robert E. Hunter was recently elected as the first full-time president of Delta Dental Plan of Massachusetts. Dr. Hunter practiced dentistry in Norwood, Massachusetts for 21 years until 1986 when he became dental director of Delta Dental Plan. Dr. Hunter is a past Secretary of the Massachusetts Dental Society.



Robert E. Hunter

Harry W. F. Dressel, Jr. recently received the Distinguished Service Award of the Maryland State Dental Association. Dr. Dressel was recognized for over 40 years of dedication and devotion to his profession and his community. He has served as a delegate to the American Dental Association for 20 years and as a member of the ADA's Scientific Session Council for 6 years. He has served as President of the Baltimore Dental Society, the Alumni Association of the University of Maryland Dental School, the Maryland Dental Service Corporation and as Vice President of the Maryland State Dental Association. He is presently serving as the 4th District Vice-Regent for the International College of Dentists.



Harry W. F. Dressel, Jr.

Larson R. Keso of Oklahoma City, Oklahoma, was recently elected a trustee of the American Association of Orthodontists. Dr. Keso is a past president of the Southwestern Society and the Oklahoma Orthodontic Society. A Diplomate of the American Board of Orthodontics, he is a consultant in Orthodontics and a member of the faculty in general practice residency at the University of Oklahoma Health Science Center.



Larson R. Keso

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Thomas R. Abbott was recently honored by the American College of Dentists by being presented a citation and a medallion for having completed 50 years of Fellowship in the College. Dr. Abbott, who is Professor Emeritus of Operative Dentistry at Marquette University School of Dentistry, received recognition in the presence of over 200 dental students, faculty and friends. Dr. Abbott was the Director of the Milwaukee Children's Hospital Dental Clinic and was later the Director of Clinics at Marquette University School of Dentistry. Dr. Abbott was inducted into the American College, November 10, 1938 in St. Louis. Missouri and remembers his first plane ride when he flew to St. Louis to attend the College convocation. The citation presented to Dr. Abbott reads: "The American College of Dentists salutes Dr. Thomas R. Abbott, a Fellow in the College, who's activities these many years attributed to the advancement of the dental profession and its public appreciation."



Paul B. Robertson

Paul B. Robertson was recently appointed Dean of the Faculty of Dentistry at the University of British Columbia. Prior to this appointment, Dr. Robertson served as Professor and Chairman of Stomatology at the University of California San Francisco. He has also served as Head of the Department of Periodontology at the University of Connecticut School of Dental Medicine. Dr. Robertson chairs the Special Grants Review Committee of the National Institute of Dental Research and serves on the editorial boards of a number of journals.



Dr. Thomas Abbott was honored at the Fall meeting of the Wisconsin Section. Photographed from the left are: Dr. Prem S. Sharma, Chairman of the Wisconsin Section and Regent, Regency 5; Dr. Thomas Abbott and Dr. Claude I. Sime, Vice Chairman of the Wisconsin Section.



William S. Frank

William S. Frank of Los Angeles, California, was recently honored for his dedication and service to the State of Israel. A 1950 graduate of the USC School of Dentistry, Dr. Frank has served as a member of its Board of Governors for 3 years and was also a Clinical Associate Professor of Restorative Dentistry. For the past 11 years he has served as a member of the Examining Committee of the California State Board of Dental Examiners. Dr. Frank is a past president of the Supreme Chapter of Omicron Kappa Upsilon and a past president of the Academy of Dentistry International. He received the Academy of General Dentistry's 1984 Humanitarian Award and the Torch of Learning Award from the Hebrew University of Jerusalem. Dr. Frank also served as Governor of District 526 of Rotary International in 1973-74.

Ralph R. Lobene, senior staff member of the Department of Clinical Investigation at Forsyth Dental Center in Boston, was honored at the American Dental Association's Annual Session Awards Luncheon with the presentation of the Colgate Palmolive/ADA Award for Outstanding Service to the Public and the Profession. Dr. Lobene is a lecturer in periodontology at the Harvard School of Dental Medicine. He served as chairman of the American Academy of Periodontology Committee on Pharmacotherapeutics and is a member of the editorial review board of the Journal of Dental Education. Dr. Lobene has served as president of the Boston Section of the American Association for Dental Research and as a consultant to the ADA, Council on Dental Therapeutics.



Ralph R. Lobene

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Sidney I. Kohn who was inducted into the American College of Dentists in 1950, sponsored his son, Donald W. Kohn, during the convocation ceremonies in Washington, D.C., October, 1988. Dr. Sidney Kohn is Professor and Chairman of the Department of Pediatric Dentistry at the Fairleigh Dickinson University College of Dental Medicine. He is a past president of the New Jersey Society of Dentistry for Children and of the American Society of Dentistry for Children. He is a founder and first president of the New Jersey Association of Pediatric Dentists and has served as an examiner for the American Board of Pediatric Dentistry. Dr. Donald W. Kohn is in the practice of Pediatric Dentistry in New Haven. Connecticut and is an Associate Clinical Professor of Surgery (Dental and Pediatrics) at the Yale University School of Medicine and also serves as the Chief of the Department of Dentistry at Yale-New Haven Hospital. Dr. Kohn is an Associate Editor of the Journal of Dentistry for children and is the President of the Connecticut Society of Pediatric Dentists.



Donald W. Kohn, on the left, with his father, Sidney I. Kohn, during the College Convocation in Washington, D.C.



Carl L. Sebelius, Sr. Carl L. Sebelius, Sr., of Springfield, Illinois, recently retired as Supreme Editor of the Xi Psi Phi Quarterly, a position he held for over 27 years. Dr. Sebelius has served as the Director of the Division of Dental Health in Tennessee. as well as a Dental Health Officer for the World Health Organization in Geneva, Switzerland. He was Assistant Secretary for Dental Health at the American Dental Association and Secretary of Councils on Dental Health and International Relations. From 1966-75. he served as Chief of the Division of Dental Health, Illinois Department of Public Health. He is a past president of the American Association of Public Health Dentists and of the State and Territorial Dental Health Officers. He has also served as chairman of the American Public Health Association and as an editor of the Journal of the Tennessee State Dental Association. An author of many scientific publications, Dr. Sebelius is a Diplomate of the American Board of Dental Public Health.



Charles Jay Miller

George S. Beagrie recently completed 10 years as Dean of the Faculty of Dentistry at the University of British Columbia and retired from that position to assume new responsibilities with the University. Dr. Beagrie is a past president of the International Association for Dental Research and the Royal College of Dentists. He has chaired the Federation Dentaire Internationale Commission on Dental Education and Practice since 1981 and has made major contributions to the World Health Organization. Dr. Beagrie is presently Chairman of the Written Examinations Committee of the National Dental Examining Board of Canada and Coordinator of a new self-assessment program for maintenance and competency and standards for dentists in Canada.



George S. Beagrie

Charles Jay Miller, of Pittsburgh, Pennsylvania, was recently presented the Distinguished Alumnus Award by the University of Pittsburgh School of Dental Medicine. Dr. Miller is a Diplomate and Fellow of the International Congress of Oral Implantologists and a charter member and past president of the Midwest Academy of Prosthodontists. He is past president of the Pittsburgh Dental Research Club and the American Academy of Dental Electrosurgery. His book, entitled "Inlays, Crowns and Bridges, An Atlas of Clinical Procedures" has been translated into Spanish, Portuguese and German. He is also a contributing author and consulting editor to the Dental Clinics of North America.

Fellows of the College in ADA Leadership Positions

The American College of Dentists is very pleased to note that all of the present officers of the American Dental Association are Fellows of the American College of Dentists. These officers are: the President, the President-Elect, the First Vice President, the Second Vice Presi-

dent, the Speaker of the House of Delegates, and the sixteen Trustees. In addition, Dr. Thomas Ginley, the Executive Director of the American Dental Association, and ADA Editor Dr. William F. Wathen, are also Fellows of the College. The American College of Dentists recognizes and applauds the service provided by its Fellows to the American Dental Association and to many other local, state, national and international professional organizations.

President



Arthur A. Dugoni

Arthur A. Dugoni, Dean of the School of Dentistry at the University of the Pacific in San Francisco, is presently serving as President of the American Dental Association. Appointed Dean in 1978. Dr. Dugoni is also Professor of Orthodontics and a Diplomate of the American Board of Orthodontics. He has served as President of the California Dental Association and was the ADA's Thirteenth District Trustee from 1984 to 1987. He was a member of the ADA's House of Delegates for eighteen years and served as a consultant for the Association's Council on Dental Education from 1973 to 1982. He has served as a member of the Board of Directors and as the President of the American Board of Orthodontics and maintained a private dental practice for nearly forty years until 1986.

President-Elect and Treasurer

R. Malcolm Overbey of Memphis, Tennessee is President-Elect of the American Dental Association. Dr. Overbey has served two terms as Trustee of the Sixth District of the American Dental Association and has maintained a general practice in Memphis since 1958. Dr. Overbey retired in 1987 as a Brigadier General in the U.S. Army Reserve Dental Corps and received the Distinguished Service Medal. the highest award presented in peace time. A Past President of the Tennessee Dental Association, the Memphis Dental Society and the Tennessee Academy of General Dentistry, Dr. Overbey has received the Outstanding Alumnus Award of the University of Tennessee College of Dentistry and the Dentist of the Year Award of the Pierre Fauchard Academy.

First Vice President

Charles H. Smith of Atlanta is First Vice President of the American Dental Association. Dr. Smith is the Chairman of the Department of Orthodontics at Emory University School of Dentistry. He is a Director and Past President of the American Board of Orthodontics, Past President of the Georgia Dental Association, the Georgia Orthodontic Society, the Southern Society of Orthodontics, and the Fifth District Dental Society of Georgia. He has served as a member of the ADA's House of Delegates for nearly twenty years and has received the Louise Ada Jarabak Memorial International Orthodontic Teachers and Research Award, the Deans Award of Emory University and the Man in Dentistry Award.



R. Malcolm Overbey



Charles H. Smith

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Second Vice President

Charles E. Wilson of Fairfield. California, is Second Vice President of the American Dental Association. Dr. Wilson is a Past President of the California Dental Association, the California Dental Service and the Napa-Solano Dental Society. A Past Chairman of the Joint Commission on National Dental Examinations, Dr. Wilson has served as a member of the ADA's House of Delegates for over twenty years. He has served as Past President of the Fairfield Chamber of Commerce and as Chairman of the Administrative Council of his church.



Charles E. Wilson

Speaker of the House



A. Gary Rainwater

A. Gary Rainwater of Dallas, Texas, is the Speaker of the House of Delegates of the American Dental Association. Dr. Rainwater has practiced general dentistry in Dallas for more than twenty years and is a Past President of the Dallas County Dental Society. He served as Speaker of the Texas Dental Association's House of Delegates from 1982 to 1988 and is a founder and member of the Executive Board of Dental Health Programs, Inc. This private, non-profit foundation affiliated with United Way, has a \$1.7 million budget funding six clinics that administer all dental care programs for the indigent in Dallas County, A Past Chairman of the Dallas Midwinter Dental Clinic, Dr. Rainwater was named Dentist of the Year in Dallas County in 1987 and has also served as Chairman of the Texas Dental Association's Council on Publications.

Editor



William F. Wathen

William F. Wathen of Fort Worth, Texas is presently serving as the Editor of the American Dental Association. As such, he serves as an officer of the Association and heads the Editorial Division which is responsible for publication of the Journal of the American Dental Association, the ADA News, Special Care in Dentistry, Dental Abstracts, and Dental Teamwork. Dr. Wathen has served as President of the Fort Worth Dental Society, Vice President of the Texas Dental Association and was Editor of the Texas Dental Journal for 11 years. He served in the ADA House from 1975-86 and is a member of the American Association of Dental Editors, of which he has served as Treasurer since 1984. He received the Texas Dental Association's President Award in 1982 and the Fort Worth District Dental Society's Distinguished Service Award in 1985. Dr. Wathen is in the general private practice of dentistry and is Clinical Professor of Oral Diagnosis and Medicine at the Texas College of Osteopathic Medicine in Fort Worth.



Thomas J. Ginley

Executive Director

Thomas J. Ginley is serving as the Executive Director of the American Dental Association. Dr. Ginley joined the ADA staff in 1963 as Director of the Council on Dental Education's Division of Educational Measurements. He later became Assistant Secretary, Associate Secretary and eventually Secretary of the Council on Dental Education and Commission on Dental Accreditation.

Trustees

Jack S. Opinsky of West Hartford, Connecticut, is First District Trustee. Dr. Opinsky is Past President of the Connecticut State Dental Association, and served on the ADA's Council on Legislation, Chairing it in 1985. Dr. Opinsky has served as President of the Connecticut Chapter of the Academy of General Dentistry and of the Hartford Dental Society. He received the Distinguished Service Award of the Connecticut Academy of General Dentistry in 1984 and has also served on the Board of Trustees of the University of Connecticut as well as an instructor at the University's dental school. He received the City of Hartford's Public Health Award in 1978.



Jack S. Opinsky

Eugene J. Truono from Wilmington, Delaware, is serving his second term as Fourth District Trustee. Dr. Truono has served for nearly two decades in the ADA's House of Delegates and has been Vice Chairman of the ADA's Council on Dental Care Programs. A Past President of the Delaware State Dental Society, Dr. Truono was instrumental in the passage of legislation requiring the fluoridation of public water supplies in the state. He is a recipient of the Alumnus of the Year Award from the Temple University Alumni Association.



Wilfred A. Springer

Wilfred A. Springer of Rochester, New York, is Trustee of the Second District. Dr. Springer has served as President of the Dental Society of the State of New York and as the ADA's First Vice President in 1982-1983. Dr. Springer was a member of the ADA's Council on Legislation for six years and chaired the Council from 1979-1981. He organized and chaired the First ADA Conference on State Legislative Issues and has served as a member of the American Medical Association's Council on Legislation. Dr. Springer is a Past President of the Second District Dental Society of New York and is a member of the Board of Trustees of the Eastman Dental Center.



Eugene J. Truono

Alex J. McKechnie of Camp Hill, Pennsylvania, is Trustee of the Third District. Dr. McKechnie has maintained a general dental practice for thirty-six years and served as Second Vice President of the ADA in 1980–1981. He has served as President of the Pennsylvania Dental Association, the Harrisburg area Dental Society, the Pennsylvania Chapter of the Academy of General Dentistry and has been a member of the Pennsylvania State Dental Council and Examining Board.



Alex J. McKechnie



Lewis S. Earle

Lewis S. Earle of Winter Park, Florida, is serving his second term as Fifth District Trustee. Dr. Earle has served as President of the Florida Dental Association and was twice named Dentist of the Year by the Florida Dental Association. He has also served in the Florida House of Representatives for three terms and was the House Republican Floor Leader from 1972–1974.

Frank H. Stevens of Bridgeport. West Virginia, is Sixth District Trustee. Dr. Stevens is a Professor of Operative Dentistry at the West Virginia University School of Dentistry and has practiced general dentistry in Bridgeport for more than twenty years. He is a Past President of the West Virginia Dental Association and the West Virginia University School of Dentistry Alumni Association. He is also Past President of Rotary International's Bridgeport Club and the Harrison County West Virginia Board of Education.



Frank H. Stevens



Gerald A. Larson

Gerald A. Larson of Brookfield. Wisconsin, is Ninth District Trustee. A Past President of the Wisconsin Dental Association, Dr. Larson has been a member of the ADA's House of Delegates for fourteen years. He has served as Vice Chairman of the Association's Council on Dental Care Programs and is presently an ADA consultant to the Research Triangle Institute. Dr. Larson has received the Wisconsin Dental Association's Outstanding Service Award and Marquette University's Distinguished Alumnus in Dentistry Award.

James Mercer of Akron, Ohio, is Seventh District Trustee. Dr. Mercer has practiced general dentistry in Akron for more than thirty years and is a Past President of the Ohio Dental Association and the Akron Dental Society. He has served in the ADA's House of Delegates for nearly ten years, was Vice Chairman of the ADA's Council on Dental Education, and Chairman of its Commissions Committee on Dental Assistant Education and Dental Hygiene Education. He has received the Distinguished Dentist Awards of the Ohio Dental Association and the Akron Dental Society. He is also a Past President and Past Chairman of the Board of United Cerebral Palsy of Akron and the Past Chairman of Akron's Citizens Committee for Fluoridation.



James Mercer

James N. Clark of Dubuque, Iowa, is Tenth District Trustee. Dr. Clark has had a private practice in Dubuque for more than twenty years. He is a Past President of the American Society of Dentistry for Children, the Dubuque District Dental Society, the Iowa Society of Dentistry for Children and the Tri-State Dentistry for Children. He has served on the Manpower Committee and the Dental Prepayment Committee of the Iowa Dental Association and in the U.S. Army's Dental Corps. He has been a member of the Board of Directors of Delta Dental Plan of Iowa.

Cyril L. Friend, Jr., of Metropolis, Illinois, is Eighth District Trustee. Dr. Friend has served on the ADA's House of Delegates for eight years, has been a member of its Council on Federal Dental Services and has chaired the Association's Reference Committee on Dental Care Plans. He is a Past President of the Illinois State Dental Society and is an administrative officer of the Kentucky Lake U.S. Power Squadron. A colonel in the Dental Corps of the U.S. Army Reserve, he served for fourteen years as a staff dentist for the Vienna, Illinois Correctional Center.



Cyril L. Friend, Jr.



James N. Clark

Geraldine T. Morrow of Anchorage, Alaska, is Eleventh District Trustee. Dr. Morrow is a Past President and former Executive Director of the Alaska Dental Society and serves as Dean of Allied Health Sciences at the University of Alaska, Anchorage. Dr. Morrow has served on the ADA's Council on Dental Health and Health Planning for six years and chaired the Council in 1983-1984. She has served as the Alaska Delegate to the ADA for nine years. She received an Honorary Doctor of Science Degree from Georgetown University School of Dentistry in 1987 where she delivered the Commencement Address.



Geraldine T. Morrow

Bert Y. Hayashi of Honolulu, Hawaii, is Fourteenth District Trustee. Dr. Hayaski is a Past President of the Hawaii Dental Association and has served as Delegate to the ADA since 1980. He has also served as President of the Honolulu County Dental Society and as Deputy District Governor of the Hawaii Lions and the President of the Hawaii Lions Eye Foundation. Dr. Hayashi has been in private practice of dentistry in Honolulu for more than thirty years.



Bert Y. Kayashi

Jack H. Harris of Pearland, Texas, is Trustee of the Fifteenth District. Dr. Harris has served as a member of the ADA House of Delegates for thirteen years and as a Past President of the Texas Dental Association. In 1980 he was named Texas Dentist of the Year. He is a member of the American Academy of Periodontology and has maintained a private practice of periodontics since 1964. He has served as a representative to the Texas legislature.

Joseph P. Chancey, Jr. of Fort Smith, Arkansas, is Twelfth District Trustee. Dr. Chancey is a Past President of the Arkansas State Dental Association and served as a member of the ADA's House of Delegates for more than ten years. He also served on the Association's Council on Dental Materials, Instruments and Equipment. He has served as Vice Chairman for the Arkansas Section of the American College of Dentists and Chairman of its Tri-State Section. Dr. Chancey has served as President of the Missouri School of Dentistry Alumni Association and received the University's Alumnus of the Year Award for 1985.



Joseph P. Chancey, Jr.



Jack H. Harris



James H. Gaines

Douglas R. Franklin, a general dentist from San Leandro, California, is Thirteenth District Trustee. Dr. Franklin is a Past President of the California Dental Association, the Southern Alameda County Dental Society and the East Bay Dental Conference. He is Past Third Vice President of the ADA and has served in its House of Delegates for more than twenty years. He chaired the Association's Committee on Professionalism and Ethics in 1985-1986 and is a past member of the ADA's Long-range Planning Committee. Dr. Franklin has served as a consultant to the Assistant Secretary of Defense for Health and Environment representing the ADA.



Douglas R. Franklin

James H. Gaines, a general dentist from Greenville, South Carolina, is in his second term as Trustee from the Sixteenth District. Dr. Gaines is a Past President of the South Carolina Dental Association, the South Carolina Academy of General Dentistry and the Greenville County Dental Society. He served on the ADA's Council on Insurance for six years. He has been an evaluator for the Kellogg Foundation-funded DEMCAD project and the governor's appointee on the Board of Directors of the South Carolina Joint Underwriters Association for Medical Malpractice Insurance. He has received the Distinguished Service Award of the Greenville County Dental Society and the George P. Hoffman Distinguished Dentist Award of the South Carolina Dental Association.

SECTION ACTIVITIES

European Section



The European Section met in Washington, D.C. on October 8 during the annual meeting of the College. Photographed are some of the Fellows from Europe, along with ACD officers who were present at the meeting. Standing from the left are; Dr. Ian Gainsford (UK); Dr. Brian Parkins (UK); Dr. Gordon H. Rovelstad, Executive Director, American College of Dentists; Dr. R. Edwards (France); Dr. Franciscus Lankhof (Netherlands); Dr. Ruth Friedman, Regent, Regency 2; Dr. Jean Tecucianu (France); Dr. Jean Roger (France) and Dr. Robert W. Elliott, Jr., President, American College of Dentists. Seated from the left are Dr. Juan Serrano (France); Dr. Gerald Leatherman (UK); Dr. Pierre Marois (France); Dr. Joseph Cappuccio, Regent, Regency 2 and Dr. James A. Harrell, Sr., ACD President-Elect. Dr. Runo Cronstrom (Sweden), also attended the meeting but is not in the photograph.



Photographed at the Florida Section's meeting are from the left: Dr. Robert W. Williams, Dr. James E. Waddell, Dr. Earl L. Williams, Dr. James A. Harrell, Dr. Curtis E. Gause and Dr. Chris C. Scures.



Photographed from the left are Dr. C. W. Fain, Jr., Dr. Robert W. Elliott, Jr.; Dr. James A. Harrell, Sr.; Dr. Chris C. Scures and Dr. Lewis S. Earle at the Florida Section's meeting.

Florida Section Supports Several Activities

The Florida Section held its annual meeting November 13 and 14 in Orlando and conducted a scientific presentation followed by a dinner and dance. A business-breakfast meeting was held the next day, followed by a forum discussion. Sixty-five Fellows attended the meeting, including ACD past presidents, Dr. C. W. Fain, Jr. and Dr. Robert W. Elliott, Jr. Also in attendance were ADA Fifth District Trustee, Dr. Lewis S. Earle; ACD President, Dr. James A. Harrell, Sr. and ACD Regent, Dr. Chris C. Scures. President, James Harrell, installed the new Section officers who are as follows: Chairman, Dr. Curtis E. Gause, Chairman-elect, Dr. James E. Waddell; Vice Chairman, Dr. Robert W. Williams, and Secretary/Treasurer, Dr. Chris C. Scures.

The Section approved the following at its business meeting:

- 1. A \$1,000 contribution to the American College of Dentists Campaign for the 90's.
- 2. To continue to support the programs of the University of Florida College of Dentistry by providing a \$600 contribution.
- To continue to honor a student at the school with a presentation of the "C. W. Fain, Jr. Professionalism Award" consisting of a plaque and \$200.
- 3. To recognize a member of the School of Dentistry's faculty for excellence in teaching ethics and professionalism.
- 5. To continue to invite senior students from the School of Dentistry to be guests at the Section's June breakfast meeting.

Oklahoma Section Implements an Innovative Student Work-Study Project

A senior dental student working with the University of Oklahoma College of Dentistry's recruitment team visiting college campuses in the State and surrounding areas is a part of an innovative program implemented by the Oklahoma Section. The Section provides funding for the work-study project and, this year, selected a senior dental student from four excellent applicants. The work-study student visited the campus of Oklahoma State University and spoke to 27 interested students and is now in the process of conducting similar visits to other campuses in Oklahoma and surrounding states. The primary purpose of the work-study project is to help recruit quality dental applicants.

The Oklahoma Section also provides recognition to a dental student with superior academic achievement and is now looking into how it can assist with the teaching of ethics in the dental school.

Western New York Section Celebrates 10th Anniversary of its Charter

The Western New York Section recently celebrated the 10th anniversary of the granting of its charter at an all-day meeting in Buffalo, New York. The meeting was followed by a visit and tour of the School of Dentistry, State University of New York at Buffalo. Among the speakers at the meeting were Dr. William M. Feagans, Dean of the School of Dentistry; Dr. I. Lawrence Kerr and Dr. Robert W. Elliott, Jr.

The Western New York Section's officers, beginning January 1, 1989 are: Chairman, Dr. Ralph S. Vescio; Vice Chairman, Dr. Peter A. Carrillo and Secretary/Treasurer, Dr. Warren M. Shaddock.



Dr. Dean L. Johnson, Chairman of the Oklahoma Section on the left, presented the seal of the American College of Dentists to Dr. Robert W. Elliott, Jr..

Oregon Section Institutes a Luncheon for Learning Program

A successful Luncheon for Learning program, instituted by the Oregon Section in 1987, was repeated in 1988. Fellows served as hosts at tables during the Oregon Dental Association's annual session and presented scientific information to dentists attending the meeting. A similar event is being planned for 1989. The Oregon Section officers are: Chairman, Dr. Walter N. Johnson; Vice Chairman, James W. Tinkle; and Secretary/ Treasurer, Charles A. Gutweniger.



Dr. Louis G. Terkla, former Dean of the Oregon School of Dentistry, and former President of the American College of Dentists, was one of 20 Fellows who hosted tables at the 1988 Oregon Dental Association's annual meeting in Portland.



Photographed at the Western New York Section's meeting are, from the left: Regent, George L. O'Grady, Section Chairman, Robert W. Baker and ACD President, Robert W. Elliott, Jr. Dr. O'Grady passed away November 3, 1988.

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INSTRUCTIONS FOR AUTHORS

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, advances and statements of opinion pertinent to dentistry. Papers do not necessarily represent the view of the Editors, Editorial Staff or the American College of Dentists.

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

The primary author must ensure that the manuscript has been seen and approved by all co-authors. Initial receipt of all manuscripts submitted will be acknowledged and, at the conclusion of the review procedure, authors will be notified of (1) acceptance, (2) need for revision, or (3) rejection of their papers.

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

All pages, including Title Page, Tables and Figure legends, should be numbered consecutively in the top right-hand corner. The first page should list title of manuscript with the first letters of the main words capitalized (do not use Part I, etc.), author's (or authors') initials and name(s) in capitals (no titles or degrees), complete professional address(es) (including ZIP or Postal Code), a short title of NOT more than 45 characters in block capitals, and, as a footnote, any change in corresponding author's address since the paper was submitted. With multiple authors, relate them to their respective institutions by superscript numbers. The first author is assumed to be the one to whom correspondence and reprint requests should be directed unless otherwise stated.

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

Authors should submit an original and four copies of the manuscript and three original sets of illustrations to: Dr. Keith P. Blair. Editor.

Dorland's Illustrated Dictionary will be used as the authority for anatomical nomenclature. The American Heritage Dictionary will be used as the authority for spelling nonmedical terms. The American English form of plurals will be used where two are provided. The Index Medicus and Index to Dental Literature serve as authorities for standard abbreviations.

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Address all manuscripts and related corrrespondence to: The Editor, JOURNAL OF THE AMERICAN COLLEGE OF DEN-TISTS, Suite 352N, 7315 Wisconsin Ave., Bethesda, MD 20814-3202.

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:

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

Each reference should be checked for accuracy and completeness before the manuscript is submitted. The accuracy and completeness of references are major considerations in determining the suitability of a manuscript for publication. Reference lists that do not follow the illustrated format and punctuation or which are not typed double spaced will be returned for retyping.

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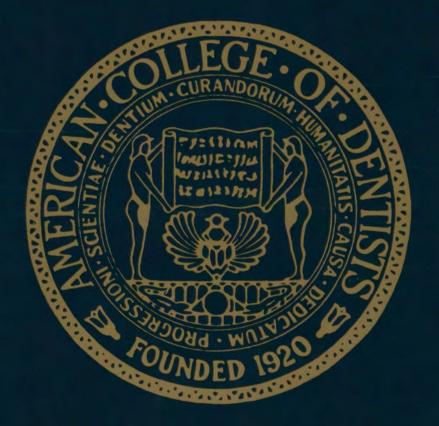
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