

# The JOURNAL of the AMERICAN COLLEGE of DENTISTS

**Preventive Dentistry:  
Fact or Fad**

**The View from  
Academe**

**Observations on  
Dental Education**

**Keeping Up with  
the Literature**

**OCTOBER, 1973**



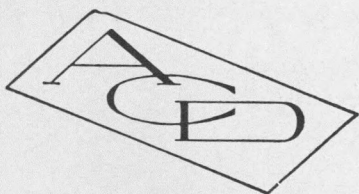
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## NEWS AND COMMENT

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*Section news announcements and items of interest should be sent to the Editor, Dr. Robert I. Kaplan, One South Forge Lane, Cherry Hill, New Jersey 08034.*

### NEW OFFICERS ELECTED FOR 1973-1974

The Officers of the College for the coming year will be:

President — *Louis G. Terkla of Portland, Oregon*

President-elect — *P. Earle Williams of Dallas, Texas*

Vice President — *James P. Verneti of Coronado, California*

Treasurer — *Henry J. Heim of Washington, D.C.*

The newly elected Regents are:

*William E. Allen of Pasadena, California*

*Richard J. Reynolds of Memphis, Tennessee*

### JOURNAL SUBSCRIPTION ASKED OF LIFE MEMBERS

The Board of Regents, responding to the increasing costs of printing and mailing the Journal has voted that life members of the College be asked to subscribe to the Journal beginning January 1, 1974.

This annual subscription for life members is to be \$5.00 per year, one half of the regular subscription rate. The Journal does not carry advertising, and since there are 908 life members who pay no dues, it has now become necessary that the cost of printing and mailing be shared in this manner. Life members will continue to receive the Journal through 1973. In November, a letter will be mailed to all life members inviting them to subscribe or to indicate they do not wish to receive the Journal.

## SECTION NEWS

## Kansas City Midwest Section

The Kansas City Midwest Section held a luncheon meeting on May 21, 1973. The following officers were elected for the coming year:

Chairman, *Donald B. Amend*  
Vice-Chairman, *Jarvis Williams*  
Secretary-Treasurer, *Peter Fedi*

Doctor John D. Arnold, Director of the Truman Research Center and Professor of Medicine at the University of Missouri-Kansas City Medical School, discussed "The Natural History of Heart Attack." The presentation was timely, interesting and informative.

The dental students' emergency loan fund for students at the University of Missouri-Kansas City School of Dentistry afforded loans to 48 students during the past year. This loan fund has been most useful in allowing short-term, interest-free loans to students without the necessity of formal application through channels which would require several days for processing. The maximum amount which a student can borrow at a time is \$100.00. The original fund stays intact while students are given up to 60 days to repay a loan. Our Section approved giving an additional \$100.00 to the fund which brought the total to \$550.00.

## NEWS OF FELLOWS

Philip E. Blackerby, a past president of the College and former president of the W.K. Kellogg Foundation has been named recipient of the ADA's Distinguished Service Award.

Sigurd P. Ramfjord, professor and chairman of periodontics at the University of Michigan Dental School will receive the Gold Medal Award of the American Academy of Periodontology at its 59th annual session in October in San Antonio, Texas.

Albert J. Aaronian has been appointed Assistant Chief Medical Director for Dentistry at the Veterans' Administration central office in Washington, D.C.

*(Continued on Page 251)*



# the JOURNAL of the AMERICAN COLLEGE of DENTISTS

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A QUARTERLY PRESENTING IDEAS IN DENTISTRY

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WALTER H. MOSMANN DALE A. HILLS

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JAY H. ESHELMAN

*Orator*

## The Orator of the College

Jay H. Eshelman of Philadelphia; teacher, practitioner, clinician, writer, lecturer and dental organization activist and leader serves as Orator of the American College of Dentists.

Born in Lancaster County, Pennsylvania, he took his pre-professional education at Elizabethtown College and his dental degree from Temple University in 1934. He has been in general practice in the Germantown section of Philadelphia ever since. From 1949 to the present he has been a member of the faculty of Temple University Dental School, and currently is Adjunct Professor of Community Dentistry.

Dr. Eshelman has had a long and distinguished career of service to his profession. As a clinician and lecturer he has appeared before local, state and national dental associations in the United States and Canada, presenting more than 300 clinics and papers on subjects relating to practice administration, public health, community dentistry and patient relations, and has published numerous articles on these topics in various dental journals.

Active on all levels of dental organizations, he has been secretary, and member of the Board of Governors of the Philadelphia County Dental Society, president of the Pennsylvania Dental Association, and a delegate for many years to the American Dental Association.

On the national level, Dr. Eshelman's activities in the American Dental Association have been noteworthy. He was chairman of the Council on Dental Health, chairman of the Section on Practice Administration, and chairman of the Committee on Local Arrangements for the 1960 meeting, following which he served as first vice president. From 1966 to 1971 he was trustee from the Second District. He was a member of the ADA's Task Force on the Children's National Dental Health Program, and chairman of the Committee on Dental Practice of the Survey of Dentistry Committee.



He is a vice president and member of the Board of Trustees of the National Health Council, consultant to the Veterans Administration, consultant to the U. S. Public Health Service, member of the National Advisory Dental Research Council of the National Institutes of Health, and member of the National Consulting Committee of Dentists.

Dr. Eshelman is a member of the Board of Directors of the Pennsylvania Dental Service Corporation, the Board of Trustees of Elizabethtown College, and the Board of Directors of the Arch Street United Methodist Church of Philadelphia. He participated in the President's White House Conference on Health in 1965 and the Conference on Aging in 1971.

Active in the Temple University Dental Alumni Association, he served two terms as its president, and is a member of the board of the General Alumni Association of Temple University. His memberships also include the Academy of Stomatology, American Academy of General Practice, American Public Health Association, American Association of Dental Schools, American Society of Dentistry for Children, International Association for Dental Research and Federation Dentaire Internationale. He also belongs to Psi Omega Fraternity, the Union League of Philadelphia, the Benjamin Franklin Post of the American Legion and the Philadelphia Cricket Club.

He has received a number of honors and awards in his long career. These include membership in the Omicron Kappa Upsilon Honorary Dental Society, the Temple University Alumni Award, an Alumni Citation and the honorary degree of Doctor of Science from Elizabethtown College, and the Man of the Year Award from Sigma Epsilon Delta dental fraternity. He was also elected to Fellowship in the Canadian Academy of Dental Science.

Dr. Eshelman became a Fellow of the American College of Dentists in 1954. He has served as chairman of the Public Relations Committee and since 1965 has been the Orator of the College. In this capacity he has taken an important part in the Indoctrination proceedings and in the Convocation, delivering the Charge and Obligations of Membership to the assembled candidates. He discharges these duties in a most commendable manner, impressing all of his listeners with the sincerity of his message, as he stresses the high responsibilities of Fellowship. The College is privileged to have Jay Eshelman as one of its foremost exponents. We wish him many years of continued service.

# *Editorial*

## The Crisis in Dental Health Care: Real or Imagined

For some time now, the dental profession has been concerned about what has been called the “crisis” in the delivery system for dental care. Various statements have been made by persons inside and outside the profession to describe the magnitude of the problem. We have been told, for example, that

- There are not enough dentists to take care of the needs of the public.
- If a national health program that includes dental care is ever passed by Congress, such care must be made available for everyone.
- The dental manpower shortage will become acute, and the duties of auxiliaries must be expanded to help meet the expected demand.
- Dental schools must turn out more dentists who are better educated, in as short a time as possible.
- In the meantime, better ways for providing more care for more people at reasonable cost must be found.

If we agree with these premises, then there may indeed be a “crisis”. But let us examine them further. First of all we must recognize the difference between dental needs and dental demands. We know that nearly everyone needs dental care, but not everyone seeks it. Many people want treatment only when in pain. A relatively small percentage make it their practice to come for care on a regular basis, and there appears to be a sufficient number of dentists to meet these demands in most geographic areas.



In a large eastern city, a dental care program for high school students, funded under the Model Cities program which offered free treatment, not in a clinic, but in private offices was threatened with cancellation because only 68 out of one thousand eligible students sought care. Most of those treated saw dentists for single extractions or emergency visits, and did not return for preventive or restorative care, in spite of a well-publicized educational program.

Apathy on the part of the public may be the largest factor in the wide gap between needs and demands. Under the nationalized health program in Britain, only about half of the population sought dental care, which was provided almost free to everyone.

Can we expect human nature to change in the foreseeable future? Will the removal of the cost factor be sufficient to overcome the fears that many people experience when they consider a visit to the dentist? Or will it require a long range ongoing program of dental health education employing better methods than we use now, to close the gap between needs and demands? Should the dental profession be tooling up then for an anticipated flood of patients which may not materialize? Will there be an over-production of dentists and ultimately an oversupply? These are questions which must be answered, but we cannot answer them properly if we run scared, and accept the belief that an undoubted "crisis" exists.

There appears to be some evidence that the so-called manpower shortage may be related to a maldistribution of dentists, rather than an actual shortage. Efforts are being made to improve the situation by allowing a freer flow of dentists through reciprocity agreements between states, or by regional boards, but these efforts are complicated by the fact that dentists want to practice where they can be assured of a livelihood, and an appropriate reward for their services, which usually means that they gravitate toward metropolitan rather than rural areas.

The emphasis on expanded duties of auxiliaries is another simplistic solution to dentistry's problems. Unfortunately the desire to have auxiliaries take over some of the dentist's functions may be providing ammunition for the denturists, who are quite ready and willing to relieve the profession of its prosthetic services and responsibilities. Here too, we must exercise care in our public statements.

Recently, in a joint report by the Councils on Dental Care Programs and Dental Health to the House of Delegates of the American Dental Association, the following statement was made:

"It is indefensible for prominent individuals, in either private or public sector positions, to make use of crisis rhetoric in an attempt to force the adoption of new health care arrangements that could destroy the strong system already in existence and lead the nation into a rigid system that would prove inimical to the health of the population.

In opposing the unwarranted and indiscriminate use of "crisis" language, however, the Association would be unwise to adopt a stance that would seem to deny the existence of the obvious problems in dental care delivery that now exist. To do so, would be to play into the hands of the users of the crisis psychology, who wish the nation to believe that the health professions are insensitive and unresponsive. It would, as well, obscure the broad range of positive, innovative policies that the Association has adopted in recent years."

The following resolution, which the House will consider, therefore, seems to make good sense.

"Resolved, that the American Dental Association reaffirm both its fundamental commitment to better oral health for all Americans and its willingness to cooperate closely and actively with all agencies and individuals who share this commitment, and be it further

Resolved, that the Association strongly opposes the use of crisis rhetoric in public statements which too often in the past has oversimplified the complex problems involved, has misled segments of the public with irresponsible promises and has inaccurately criticized the genuine accomplishments and potential of the present dental health care system."

R.I.K.

# The Self Assessment and Continuing Education Program

Some Comments by Participants

*Almost four thousand dentists are taking part in the Self Assessment program being sponsored by the American College of Dentists and administered by the Educational Testing Service of Princeton, New Jersey. The second of four tests is now in progress. Below are some of the comments received after the first test:*

"I really enjoyed taking this test. After 26 years of practice, reading rather widely, but still not often seeing some of the conditions we may suddenly become faced with, I think this is a marvelous test . . . regardless of the outcome . . . am looking forward to the next test."

Dr. James F. Harber  
Odessa, Texas

"The idea is fantastic. It should be mandatory for all dentists in order to continue practice. The review examinations should be done annually and updated each year."

Dr. John Joseph BemBenek  
Burlington, Ontario, Canada

"We have a little game going here of a contests between the Oakland office and the San Francisco office (of the Naismith Dental Group) with a trophy and dinner at stake. We spend two lunch hours a week on the test and get some rather intriguing discussions going. We try to arrive at at consensus, although now and then we have a free soul. It will be interesting to see the result."

Richard Naismith, D.D.S.  
Dental Director

*The Self Assessment and Continuing Education committee is interested in having the broadest participation possible by the profession and, therefore, has left registration open for an indefinite period. If you have considered taking part in the tests, but have hesitated, you can still register by sending \$40 to the Educational Testing Service, Princeton, New Jersey 08540.*



## Symposium on Prevention

*At the third annual meeting of the American Society for Preventive Dentistry which took place in San Francisco in July, a panel discussion was held on the topic, "Preventive Dentistry: Fact or Fad." Through the cooperation of some of the participants, the Journal has obtained four of the position papers.*

*The renewal of interest in Preventive Dentistry has been accompanied by considerable controversy. Attitudes of dentists range from evangelical fervor at one extreme to almost total disregard and rejection at the other. The panellists, in their papers presented various divergent views of the subject.*

*Robert F. Barkley, one of the leaders in the prevention movement and the author of the text, Successful Preventive Dental Practices, strives to make prevention truly meaningful, workable and relevant to dentists and their patients. He believes that prevention, as practiced in the past, was largely a myth.*

*Hudson Heidorf, a consultant to the ADA Coordinating Committee on Preventive Dentistry, and a general practitioner, believes that prevention must become a way of life for dentists and patients through what he terms a preventive life style.*

*Robert I. Kaplan, a pedodontist, and consultant to the ADA Coordinating Committee on Preventive Dentistry, takes the position that much of the good in the prevention movement is being harmed by the commercialism that has invaded it.*

*John H. Mosteller, editor of the Journal of the Alabama Dental Association, and nationally known speaker and clinician, reviews the history of prevention and evaluates the scientific evidence for many of the methods used, pointing out the fads and the facts.*

*Michael C. Wolf, Director of Preventive Dentistry at Fairleigh Dickinson University School in New Jersey, attended the meeting, but was not a panellist. His paper is included in this symposium because of his perceptive comments on the present state of prevention and the way it can be integrated into dental education.*

## Prevention – Fact, Fad or Myth\*

ROBERT F. BARKLEY, D.D.S.

Although the topic assigned this panel deals only with the fact or fad status of prevention, I would be remiss if I did not add a third crucially important possibility, myth. To get a proper perspective, we must recognize that, with the exception of fluorides, *significant* preventive teaching was frequently mythical only a short decade ago. In fact, active plaque control teaching programs never achieved even fad status in more than a handful of offices prior to 1965. Since that time, thousands of dentists have abandoned the impotent lecture, pamphlet, demonstration method of teaching home care in favor of programs that are more educationally and behaviorally sound. To be sure, many of these have been inadequately planned and have not yet achieved more than fad status. Some have failed miserably, but thousands have matured into reasonably sophisticated programs. So why should we spend valuable time discussing whether the new prevention is any different than the old? How did the argument get started anyway? It is likely an inevitable result of a significant change of direction by the dental profession.

At the present time, dentistry is in the midst of a great renewal of purpose. A new morality is developing that will likely become the dominant theme of the future. Promotion of health before (and sometimes *instead* of) repair is coming into vogue. Prevention, for decades the poorest crowd-getter at any dental meeting, has come alive with explosive force to capture the imagination of tens of thousands of dentists. Their thirst for knowledge about *effective* prevention has caused them to set new attendance records at meetings from coast to coast. Program chairmen have been inundated with people trying to get seats in lecture halls, and treasurers have banked greater surpluses of funds than have ever been seen in the

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\*Presented at the annual meeting of the American Society for Preventive Dentistry, San Francisco, California, July 9, 1973.

history of many dental organizations. The tidal wave of prevention has moved state and local societies to repeatedly promote preventive meetings and in 1972 The ADA Annual Convention was dedicated to preventive dentistry.

Such a dramatic and sudden change of course simply has to produce great stresses both in individual dental offices and throughout the profession. John Gardner in his book, *Self-Renewal*, says that "New ways threaten the old, and those who are wedded to the old may prove highly intolerant." Such intolerance is increasingly visible and audible in all levels of organized dentistry and has, in fact, provided the impetus for this panel discussion.

Gardner has considerably more to say about resistance to change, particularly in large organizations and professions. He says that many of the established ways of doing things are held in place not because of logic, nor even by habit, but by the force of one powerful consideration: changing them would jeopardize the rights, privileges, or advantages of specific individuals . . . "as individuals develop vested interests, the organization rigidifies, and a democratic form of organization is by no means immune to the consequence. Indeed, the more democratic it is, the more vividly the vested interests of its members will be reflected in the policy of the organization. Thus a stagnant democratic organization may be particularly resistant to change." There are those who suspect that many of our local, state, and national dental organizations are afflicted with this above described condition.

#### NEWER PERCEPTION OF PREVENTIVE DENTISTRY

There are those who proclaim that there is nothing new in this recent upsurge in prevention; that yesterday's prevention was the same and certainly as effective as that promoted today. To clearly appraise this, one must first consider the mechanics of how a technology changes. In his book, *The Age of Discontinuity*, Peter Drucker declares that a great deal of new technology is not new knowledge, it is new perception. It is putting together things that no one has thought of putting together before, things that by themselves have been around a long time. This is certainly the case in our new preventive teaching. It is based very much on old scientific knowledge, much of which is a century and a half old. Nevertheless, when some of the more recent concepts of teaching and learning are utilized, a new perception of preventive teaching is created that is as different from the old as day and night.



Perhaps some basic ideas about learning provide the basis for this altered preventive teaching approach. Carl Rogers says he has lost interest in being a teacher. He says, "I realize increasingly that I am only interested in learnings which significantly influence behavior." It is possible to teach people a great deal of information that has little effect upon their behavior. Such has been the result with the majority of preventive teachings in the past (and is still the case in many offices today). While a great deal of effort is being expended, little behavior change can be noted and, therefore, any claim for actual prevention is mythical. The new preventive teaching is directed more toward learning that *does* alter behavior. In fact, if behavior does not alter, significant learning has probably not yet occurred. And so we no longer delude ourselves that we have taught unless we see results. It must be realized, however, that habit change takes time, so the long-term recall appointments in the newer preventive programs reinforce initial learning. This is of extreme importance because in those offices in which the recall programs have not altered the traditional roles of passive patients — active dentists/hygienists, the preventive program has often failed.

Rogers further believes that much significant learning is acquired through doing, that learning is facilitated when the student participates with responsibility in the learning process. Dentists and hygienists have for decades tried to teach children to clean their mouths by lecture, pamphlets, audiovisuals, and demonstration. All of this assumed that a child could learn a skill by observation, an erroneous assumption. The new preventive teaching simply has the child perform his own plaque removal, prophylaxis, and topical fluoride application. Over the years the possibility that significant learning will occur is measurably higher. In the meantime, the child does not inadvertently learn that it is his responsibility to brush his teeth, but the dentist's-hygienist's responsibility to *clean* them.

In his book, *Crisis in the Classroom*, Silberman has said that what educators must realize is that how they teach or act may be more important than what they teach. He says that the way that we do things shapes values far more effectively than the way we talk about them. Dentists have always known that the person who can easily go three or four years between scalings is periodontally healthy. Even if he can go a year with little calculus accumulation, he poses no major problem. That person, however, who cannot go more than four to six months usually has serious periodontal problems. Nevertheless, traditional preventive programs have returned our post-treatment patients every six months (or oftener) for professional prophylaxis.

Thus our practice habits stifle significant learning by depriving the patient of incentive to improve his home care to become truly healthy. The new prevention makes the patient responsible for going at least a year between prophies. He must learn to care for his mouth well enough that calculus does not form rapidly. Interim recall appointments cast him in the active role with the dentist/hygienist/dental health facilitator in the passive or facilitative role. The responsibility for health is thus left squarely upon the patient's shoulders and he can, over a period of time, achieve far more than ever before.

In spite of our full realization that success in post-periodontal patients is largely within the patient's control (and beyond that of the dentist), we have traditionally treated periodontally involved patients very soon after diagnosis. Only then have we tried to teach them (by demonstration, of course) how to maintain their periodontal health. The new prevention postpones surgical treatment until the patient has identified and become committed to *his* problem. Surgery is often delayed for as much as a year or eighteen months. Quite often by that time the need for surgery has been drastically reduced or sometimes eliminated.

#### LEARNING IS THE KEY

The changes in preventive teaching are derived primarily from new knowledge about learning. For years we have had adequate scientific knowledge to help our patients. We have *not* had the ability to help them alter their habits. Learning is the key, and as our knowledge in this area expands, we will make significant steps toward reducing the dental disease rate of our people.

We have only begun to change more positive practice in dentistry. The current visible and audible intolerance is likely to become more visible and more audible — yet change we will. A number of schools have developed pilot clinical programs to give experimental training in these newer concepts of positive patient management. Two schools, Loma Linda and The University of Pennsylvania have significant clinical operations that are being carefully nurtured. Several other schools including Louisiana State, Iowa, and Southern California, are also developing such teaching clinics. The students in these pilot programs are vertically grouped with a freshman, sophomore, junior, and senior managing a reasonably permanent group practice. Patients can return year after year thus allowing the students experimental training in long-term-patient management. A

high state of health can be promoted without undue need to get treatment instituted and completed. As the emphasis on early treatment is somewhat diminished, the patient's role in his own dental health care program becomes a great deal more significant. Habit changes have time to take place. As the students from these pilot programs graduate, they will have an entirely different perspective than those being graduated today. Furthermore, as these pilot programs prove to offer a vastly better learning environment, entire schools will convert their clinical operations. Other schools will follow suit until all of the schools in the country allow their students to have long-term relationships with patients. As these men graduate, they will, together with the ever-increasing number of practicing dentists who are making the switch to the new prevention, lead our profession to greater heights than it has ever known.

In closing, we could say that prevention has for decades been largely mythical if we judge its actual impact upon society. In thousands of dental offices, it has moved through the fad status to become hard fact, and it is continuing to mature in many others.

5 Doctors Lane  
Macomb, Illinois 61455

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*As a solid rock is not shaken by a strong gale, so wise persons remain unaffected by praise or censure.*

*Buddha*



# Prevention: A Way of Life

HUDSON HEIDORF, D.D.S.

Everyone in the profession agrees on the necessity for preventing dental disease. A great deal of conflict has arisen, however, not over the validity of this basic premise, but over the need for better methods of prevention. When we consider the reality of what we have been doing, and our poor ratio of success in the past, we are compelled to admit that the traditional methods of prevention have not been very effective.

If someone were to develop a vaccine that would eliminate plaque and tooth decay and periodontal disease, we would all begin to use it, with very little change required in the way we practice. There is a less dramatic way to accomplish these aims, however, but it requires a complete change in our practices, in our approach to our patients, and in our own personal lives. It requires that we adopt what I have called, for want of a better term, a preventive life-style.

Once we accept the premise that a change is essential, and are willing enough and flexible enough to adopt new methods, we can turn our backs on the past and move ahead without confusion or indecision or regret.

First of all we must differentiate between pure or primary prevention and secondary prevention. Primary prevention is anything we do that interrupts the biological processes that cause disease of the teeth and supporting tissues. Secondary prevention is treating the symptoms and effects of those disease processes in order to prevent further breakdown. A person with plaque on his teeth may not have dental disease, but dental disease usually will not take place when plaque is absent from the teeth. Primary prevention then involves the interruption of plaque physiology, and its relationship to the susceptible tissues. If we can alter the metabolism of the plaque or eliminate its intimate relationship with the dental structures, we can prevent disease. At present, not enough is known about plaque physiology and metabolism to change it by medication, rinses, or

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\* Presented at the annual meeting of the American Society for Preventive Dentistry, San Francisco, California, July 9, 1973.

vaccines. The only thing that we can do now that is at all effective is to physically interrupt the relationship of plaque to the tissues. If we can control plaque, we can control most dental disease. The studies done by C. C. Bass many years ago have proven this fact, and repeated studies have not contradicted his findings. Preventive measures have been repeatedly shown to be more effective than restorative measures in increasing the longevity of the dentition.

#### PRESENT STATUS OF PREVENTION

Where do we stand today? How is the needed change going to take place in our profession? We have had some very effective leaders and evangelists over the past decade who have brought the matter to our attention and have pricked our professional conscience about the need for prevention rather than the traditional emphasis on restorative dentistry. We have gone through an emotional, enthusiastic time about prevention in dentistry and this Society is one of the outgrowths of that enthusiasm. We have witnessed the prevention backlash; we have heard the cries of dentists who have had difficulty or have failed in their efforts to incorporate a preventive orientation in their practices. But there is also a large group of people who have kept silent because, for one reason or another, they have been unable to decide whether prevention is fact or fad.

I do not believe that prevention is a fad. I think the many arguments and conflicts over the mode of delivery, and the commercialism that has surrounded prevention in the past few years are unfortunate, and lead many sincere people to look on the prevention movement as a fad that will eventually disappear. But these things are merely the side issues, which presently tend to obscure the essential truths.

What is prevention then? Is it plaque control, or fluoride programs or diet counseling? Can we learn it at a meeting, or from a book or someone's pamphlets, and bring it home and integrate it into our daily practice? This is the quickest way to failure. One cannot adopt someone else's control program and expect instant and complete success. It is not that simple.

Prevention is a highly individual manner of practice and a philosophy and a way of life. It must encompass a balance between disease control and restorative dentistry. The dentist must assume the role of educator and counsellor, but the patient must be motivated to accept a large part of the responsibility for his own

dental health. Many preventive dentists will insist that the patient master the techniques of self care — brushing, flossing and other methods of plaque removal — before accepting the patient for restorative treatment. Others have questioned the morality of rejecting patients if they fail to exhibit such ability. I see nothing immoral about such procedure, for an unwillingness to accept the responsibility for self care can markedly lower the potential for successful restorative treatment. We are looking for long-term benefits and they cannot be obtained without faithful cooperation on the part of the patient.

#### BASIS FOR A PREVENTIVE LIFE STYLE

As a basis for the preventive life style, the dentist must understand the dynamic nature of dental disease, the constant deterioration that we deal with, and the minimal effect of restorative efforts on this continuum of disease. When we examine a new patient, chart, record, take radiographs and study casts, we learn what is happening in the patient's mouth at that moment in time. We can only guess at what has gone on before. We may see a disease condition, but we know nothing of its rapidity and little of its severity. It is as though we are looking at one frame of a moving picture film.

If we understand the dynamic nature of disease, we can try to influence the future health of the patient's mouth by what we do for him and what he does for himself. Together, we can thus interrupt the dynamics of the disease and by doing so, make a profound change in its prognosis.

Motivation is the key, for both patient and dentist. Unless the dentist is motivated by a complete belief in the preventive concept and the necessity for conducting his practice in keeping with his belief, he will not be able to motivate his patients to accept their share of the responsibility for their own dental health. Only the individual dentist can decide if prevention is a fact or a fad, and no other person or agency can make that decision for him. It is not easy to change, but it can be done.

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# Preventive Dentistry – Fact or Fad?\*

ROBERT I. KAPLAN, D.D.S.

The upsurge of interest in preventive dentistry which has taken place over the past few years has captured the attention of a large segment of the profession. The establishment of the American Society of Preventive Dentistry has provided a medium for the promotion of preventive concepts, and it is rendering a valuable service to practitioners who seek better ways of bringing dental health care to their patients.

It must be recognized, however, that in spite of the interest the preventive movement has created, there has not been total acceptance of the idea by the entire profession. There has also been a certain degree of excess in the enthusiasm for the procedures and methods advocated, and an indifference to, or actual opposition by some dentists to many of the beliefs that the enthusiasts hold. Some early adherents have become turned off at their lack of success in prevention, for various reasons which I hope to bring out in this paper.

The panellists have been asked to express their opinions on the topic: "Preventive Dentistry – Fact or Fad?" My own opinion, based on the state of the art as I see it today, is that Preventive Dentistry is a combination of Fact *and* Fad, of good features and bad, of idealism of the highest type mixed with rank commercialism, and hucksterism.

Now what are the facts of prevention? These were expressed very well in a statement made by the Coordinating Committee on Preventive Dentistry of the American Dental Association.

"The committee believes that the natural dentition should last a lifetime and that the profession now has the scientific knowledge to recognize and control dental disease and the technical ability to

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correct its harmful effects. The achievement of these objectives by the dental profession is impeded, however, by problems in communication and human behavior.

Optimum dental health is within the reach of each individual, but its achievement requires the combined effort of the dentist and the patient. Treatment of dental disease is the responsibility of the dentist. The patient's responsibility is the daily maintenance of oral hygiene. The dentist must recognize, understand and attempt to resolve the problems in communication and human behavior that impede the control of dental disease by the patient.

Prevention has many aspects and can involve a wide range of procedures. The commitment to prevention must pervade the dentist's approach to all types of treatment and guide him in his communications with his patients, his colleagues and the public. There must be a total commitment to prevention which goes beyond dental practice, into the areas of public and professional education, research and dental health programs."

#### MOTIVATION

Let us examine some of these facts. The statement speaks of problems in communications and human behavior which the dentist must understand and attempt to resolve. This leads to the question of motivation, which can be the biggest obstacle to success. The largest part of the message of the missionaries of prevention is directed toward methods of getting patients to practice what the dentists preach. The question is often raised — will it ever be possible to motivate everyone to accept the responsibility for their own dental health through the practice of daily oral hygiene? There seems to be considerable doubt about it.

"The technical skill, time, effort and perseverance required to continually maintain a high standard of oral cleanliness exceed the ability of the average human being," said Dr. Harald Loe of the Dental Research Institute of the University of Michigan. Speaking recently at the 25th anniversary meeting of the National Institute of Dental Research, Dr. Loe went on to say, "The fact that the public has been purchasing power-driven brushes, water irrigation devices and a multitude of other gadgets shows a general dissatisfaction with the hand brush level of technology and a definite interest in improving the state of oral hygiene — provided this can occur without much personal effort. This is somewhat encouraging. What is not encouraging at all is the lack of constructive imagination on the

part of the dental profession and the industry in developing mechanical devices for swift and effective cleansing of the teeth." Dr. Loe, I might add, was reporting on the development of a non-toxic oral disinfectant which can be used once a week to inhibit plaque formation and reduce the number of oral bacteria.

Less skeptical is Richard E. Rehberg in his article, "Motivation in Preventive Dentistry." He defines motivation as "a goal seeking drive, in which a person is impelled from within to take action to achieve a desirable end or avoid a situation which seems undesirable." "Actually," he states, "there is no such thing as an unmotivated act in our lives." Rehberg then goes on to say that "one cannot be motivated by others. He must motivate himself, and it is the conditions to which he is exposed at any given time plus his experiences that determine how he will motivate himself."

#### POSTITIVE AND NEGATIVE CONDITIONS

Conditions for motivation fall into two categories — positive and negative, or motivating and demotivating. Positive conditions include:

1. Exposure to highly motivated persons — the dentist and members of his staff.
2. A personal history of poor dentition and extensive dental disease.
3. A high dental IQ — that is, a good understanding of dental disease and the need for complete dental care.
4. Confidence in dentists and dentistry, based on past good experiences.
5. A personal life style that displays concern for good health and appearance.

Negative or demotivating conditions include:

1. Exposure to non-motivated or skeptical dentists and dental personnel.
2. Good dentition, with little or no experience with dental disease.
3. A low dental IQ with little understanding of dental disease.
4. Bad experiences with dentists and dentistry.
5. Personal problems which take precedence over dental needs.
6. A life style that shows little concern for good health and appearance.

Rehberg cites studies that indicate the impossibility of motivating all patients, and states that a figure of 75 to 80% appears to be the maximum in the best of preventive practices. He feels, however, that



every patient should be exposed to positive motivating conditions at each dental visit.

Gerald Latimer of Austin, Texas takes a more realistic attitude when he states, "The dentist who starts a preventive program expecting a very high rate of success is likely to become disenchanted with the whole idea of prevention if he goes into the program with expectations that are too high." He claims a success rate of 10 to 20% on new patients, but although this figure may seem low, it increases cumulatively each year as new patients enter his practice.

#### PROBLEMS IN MOTIVATION

Writing in the Texas Dental Journal, Latimer describes in his paper, "Unobtainable Goals," some of the problems he encountered in his efforts to motivate his patients.

"When I first realized the tremendous results that could be achieved when patients accept and practice preventive measures, I became somewhat disappointed with my patients who did not achieve this high degree of prevention. I became a god of the clean tooth with the authority to sit in judgment of all that came before me for my deified observations of their mouth on their recall visits.

One patient toppled me from my ecclesiastical throne and forced me to consider a distasteful conclusion. She was about 50 years of age some five years ago when I first saw her. I put her through my preventive program, but when she returned in six months on her recall visit, I found that she had made no improvement at all in keeping her teeth clean. I stained her teeth with a disclosing wafer which demonstrated microcosm on all of her teeth to an appreciable extent. I was chagrined and I rebuked her for her lack of effort. I began reiterating the concepts of prevention. After several minutes I noticed a tear coursing down her cheek. I immediately stopped talking because I did not know what else to do. After a few seconds she began to sob with an increased flow of tears. I said nothing. After a minute or so she regained her composure and gave me a resume of all the personal and family problems that she had encountered in the past six months with an assurance that she would do better in the future. I can assure you that I was very humble and contrite by the time she had finished. This woman had been striving to stay in touch with reality — her teeth and her gingival tissues were the very least of her worries during that time.

This experience drove home to me with stunning impact the fact that there are patients, whole patients — psyche and cells, attached to the teeth, and that these patients possibly have problems,

situations and stresses that disqualify me from sitting in judgment of them.

This experience, recounted over a period of several months, made me consider the possibility of a distasteful conclusion. Since I had decided in my own mind that my success as a dentist would be determined by how many patients I could influence to prevent dental disease in their own mouths, then perhaps my judging the patients so intensely might indicate more concern for my personal success than for the welfare of the patient. This might tend to make one judge patients with a degree of censure.

With the realization of this possibility I began to approach my recall patients with a completely different attitude. I decided that by repetition I would continue to educate and attempt to motivate my patients to control their dental disease, but that I would do these things on a very gentle, even humorous basis realizing that each patient reserves the right, depending on his own particular set of circumstances and attitudes, to do what he chooses or must do without censure from me."

I believe you will agree that Doctor Latimer takes an honest and realistic viewpoint of the problems of motivation. It is an attitude that those of us who seek high rates of cooperation as an index of our success in prevention, might well take to heart.

Let us now consider some of the other aspects of prevention.

Early last year, I had the occasion to write an editorial for the *Journal of the American College of Dentists*, entitled, "Prevention — A Broader View." In it, I commended the revival of interest in Preventive Dentistry, but criticized those who believed that prevention was only concerned with plaque control. I made the assertion that prevention encompasses everything that a dentist does for his patients, and expressed concern that an over emphasis on plaque control may be leading some practitioners to neglect the important areas of restorative dentistry. I am disturbed when I hear of dentists refusing to perform restorative treatment for patients who fail to master the techniques of plaque control as a prerequisite, and consider this a shameful abdication of professional responsibility. I stated, in concluding the editorial, that plaque control is one form of prevention, but prevention is much more than just plaque control.

In the year that has passed, I see little to make me change my opinions. I have been taken to task for criticizing the evangelists who have been travelling the length and breadth of the land, telling dentists how to practice.

What happens when an impressionable young dentist listens to one of the evangelists? If he goes back to his office fired up, with the idea of rendering a better service for his patients, that is most commendable. But what if his interest is based only on the thought of making more money? He begins to sell prevention, offering his patients a series of visits, at a price, in which he or one of his auxiliaries will teach the patient brushing and flossing techniques. Now this dentist or his auxiliary may not be the persuasive speaker that the lecturer was, and some of his patients may refuse his proposal. Some may even leave him to find another dentist, and if he gets enough turn downs and loses a few patients, he is going to be discouraged about prevention and lose all of that bright, shiny enthusiasm. He fails to recognize that the methods he has been taught may not be the best ones for him to employ. What works for one person does not necessarily work for all.

The proper technique as you realize is to tailor ones methods to the needs of the patient, to the patients level of intelligence and his ability to respond to your teaching. On this point, I might mention that few patients can be fully motivated by a pamphlet, a slide presentation, or a look at their own mouth bacteria under a microscope. Fear is generally not an effective long-term motivator. People will smoke, even though they know it is harmful to their health, and they will eat sweets even though they get tooth decay. It takes more than a scare technique to move them and keep them motivated, as many dentists have learned to their chagrin.

#### ABUSES OF THE PREVENTIVE CONCEPT

I have a serious concern about other aspects of the prevention movement, and mentioned earlier the commercialism that has crept in. A large number of devices and gadgets have appeared on the dental market, and some commercial interests have viewed prevention as an excellent money making opportunity. Many manuals, brochures, pamphlets and newspapers have appeared, which describe the preventive techniques employed by individuals or groups of dentists. Although the information some contain may be of value, the merchandising of them appears tied to the profit motive or the desire for personal aggrandizement.

I am concerned when a dentist uses prevention to blow his own horn, and give the people of his community the impression that he is superior to his colleagues because he has a preventive program going in his office. This is the sort of thing that eager newspaper reporters



pick up and magnify out of proportion, causing problems for the recipients of such publicity when district society ethics committees get after them for unethical conduct.

Let us face the facts — prevention, no matter how you look at it, is not a specialty of dentistry. It is an important and integral part of dental practice not the end-all and be-all that some of its enthusiasts claim it is. Furthermore, prevention is not a new concept. As Russell Sumnicht of Kansas City stated in the *Ohio Dental Journal* last year, "Many of the things popular speakers are exciting dental audiences with today can be read, if not exactly word for word, at least idea for idea, in text books gathering dust in libraries, many far pre-dating G.V. Black. Dr. Black himself devoted a large portion of his book, *Special Dental Pathology*, published in 1915, to the prevention of disease. As an example, he wrote, "Somehow the treatment of dental caries and fillings and other operations has become the principal service of the dentist to such an extent that the soft tissues are neglected until it becomes apparent that severe disease has developed and there is imminent danger that the teeth will be lost." Do these words sound familiar? He also wrote, "If each dentist will bring himself to realize that he may be preventing the loss of the entire dentition every time he prevents or cures a slight gingivitis, he will come to really appreciate the value of this service."

"These statements are quoted from 476 pages of testimony that the concept of preventive dentistry is at least 62 years old. Further, they come from the teachings of a man whose name most of us associate with excellence in reparative and restorative dentistry.

Is there something mysterious or secret about preventive dentistry? Far from it. Preventive dentistry is nothing more than the logical application of available knowledge of patient care. It is logic which dictates preference for prevention over control, for control over cure, and for cure over loss and accommodation to loss."

Many dentists have been practicing prevention for years and are providing a thorough service for their patients, a service which includes a careful clinical and radiographic examination, thorough dental prophylaxis at regular intervals, application of topical fluoride, dietary advice, instructions in toothbrushing, flossing and home care, and periodic recall for maintenance of dental health. Many of these dentists have been continuous students since the day they graduated, and are familiar with all of the new materials and techniques. They are wondering now what all the excitement is about, and are somewhat resentful when told that they are out of date, that they practice what is scoffingly referred to as "drill-fill-

and-bill." As they see it, the only difference between their type of practice and the new prevention-oriented practice is that they charge no fee for teaching a patient how to control the plaque on his teeth, while the new enthusiasts want to be paid for doing it.

I hope that you do not get the idea that I oppose preventive dentistry. I do not. I practice prevention, and am proud to say that I have a fair sized group of young patients on a successful plaque control program. But I do not believe that plaque control is all there is to prevention, or that prevention is all there is to dentistry. I do believe that prevention is the thread that binds together all disciplines of dentistry into a united whole. The fact that there are some abuses perpetrated by individuals for their own purposes does not nullify the essential good of the preventive concept.

#### RECOMMENDATIONS

In closing, let me offer two constructive recommendations to the American Society of Preventive Dentistry. The first is the suggestion that you put your house in order. Get rid of the hucksters. Set up standards for quality and develop a mechanism for screening the spate of literature, the manuals, brochures and whatnot being produced. Take a hard look at the gadgets and devices being promoted in the name of prevention. Place a seal of approval on those found worthy, and indicate non-acceptability of those which fail to meet A.S.P.D. standards. Publish this information in your Journal. You will be doing a service thereby not only to your membership, but to the entire profession.

And last, but by no means least, get behind the community water fluoridation movement, as individuals and as an organization. The American Society for Preventive Dentistry should be on the fluoridation firing line, with a definite policy favoring it. Resolutions in support of fluoridation from the national and state groups should be prepared and presented whenever the question reaches legislative consideration or civic debate. Your members should be leaders in citizens' committees for fluoridation and should be willing to appear before legislative hearings when necessary, to promote what is certainly one of the best preventive measures known to dental science. One day, fluoridation will be universally accepted. Until that time, the A.S.P.D. has the obligation to join in the effort for that acceptance.

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*(Continued on Page 248)*

# Preventive Dentistry: Fads and Facts\*

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## INTRODUCTION

Because of one of my editorials,<sup>1</sup> that has been reprinted in several dental journals, I was picked to play the villain on this panel. I am not an enemy of preventive dentistry; I have taught my patients prevention for well over a quarter of a century. The editorial simply tried to place preventive dentistry in its proper perspective. I did not come to San Francisco to dampen your enthusiasm. I accepted the invitation to appear on this program with the sincere hope of explaining why many dentists do not share your enthusiasm, your almost religious zeal, for prevention. We are going to review both the fads and the facts associated with preventive dentistry.

It could be said that operative dentistry prevents further decay, interceptive orthodontics prevents malocclusion, endodontics prevents the loss of teeth and some lecturers have ridden the preventive bandwagon even further. They give presentations on preventive oral surgery and preventive practice administration, as well as preventive implantology. This discussion, however, will be limited to those measures that are designed to actually prevent dental disease and the first of these is oral hygiene.

## ORAL HYGIENE – FADS

Preventive dentistry is certainly more than oral hygiene, but this is the phase of prevention that has received the most attention recently. Dentists have taught oral hygiene from the beginning. Pierre Fauchard stressed its importance over two-hundred years ago. The first periodontists announced the limitation of their practices to "Oral Hygiene." While a toothpaste manufacturer coined the slogan,

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"brush your teeth twice a day," there have been numerous toothbrush designs and brushing techniques advocated by dentists. Stillman, Charter, Fones and others are associated with brushing techniques, but Keyes<sup>2</sup> has stated, "there is no evidence that careful free-style brushing is not as satisfactory as any of the other methods for cleaning the teeth." Bass,<sup>3</sup> who is considered a messiah by many preventive oriented dentists, designed a brush twenty years ago which he named the "Right Kind" of toothbrush and he has taught if dental plaque is removed once every twenty-four hours, with his toothbrush and unwaxed floss, all dental diseases can be prevented. There is certainly nothing unique about the design of his toothbrush and unwaxed floss has been used since 1882. Actually, Parmly<sup>4</sup> recommended that teeth be cleaned by passing a thread between them as early as 1815, but the first commercially available dental floss was made by the Codman and Shurtleff Company of Randolph, Massachusetts in 1882 and was unwaxed silk. The Johnson and Johnson Company of New Brunswick, New Jersey has manufactured both waxed and unwaxed dental floss for the last seventy-five years. Nevertheless, some dentists have made a big thing out of prescribing unwaxed floss made by a small relatively unknown company in order to give their recommendation the appearance of an innovation.

Thomas,<sup>5</sup> who is an associate professor in the department of preventive dentistry at Louisiana State University, which is located in Bass's home town, is adamant that embroidery thread is the most effective dental floss. Bhaskar<sup>6</sup> feels that the use of any type of dental floss is a waste of time for many patients and that an irrigating device is the easiest and most effective way to control plaque. Others are sure the interproximal surfaces of teeth should be cleaned with a wedge of soft wood, and Peterson,<sup>7</sup> who is a disciple of H. K. Box, is convinced this should be accomplished with a piece of plastic that is marketed under the trade name of Tooth Flox.<sup>8</sup>

Electric toothbrushes were introduced before World War II, but did not become popular. Over twenty years later, a more affluent public was given the opportunity to buy more sophisticated models at a lower price and the electric toothbrush is now in vogue. The stroke of the mechanically activated toothbrushes has varied just as manual techniques have and studies have proved they are both more efficient and less efficient than manual brushing. Most authorities agree they are helpful for many patients and unnecessary for others.

Arnim<sup>9</sup> has done a great deal to popularize disclosing agents to aid patients in locating dental plaque. The John O. Butler Company of Chicago, as well as others, have manufactured disclosing tablets for

about fifteen years, but Hartzell<sup>10</sup> recommended the use of stains to reveal the presence of plaque almost sixty years ago.

There are a number of dental irrigators, or oral lavage machines, available today and they were preceded by the "swish and swallow" advocates. Emslie<sup>11</sup> was unable to remove bacterial plaque from teeth with a water jet irrigator, but Bhaskar and others insist these devices are most helpful in oral hygiene.

Coarse and detergent type foods have been recommended by many clinicians for generations, but a study by Emslie<sup>11</sup> showed that natural methods are less effective than artificial oral hygiene in removing plaque. Gum massage has been popular for a similar period and various gingival stimulators have been designed through the years, but there is no published evidence, except personal testimony, of their efficacy. Most periodontal authorities agree that gingival massage has no preventive or therapeutic value, however, it has been shown that gingival contour may be altered by the repeated use of a conical-shaped rubber or plastic device.<sup>11</sup>

#### ORAL HYGIENE — FACTS

The term, dental plaque, was coined by G. V. Black over seventy-five years ago. At about the same time, James Leon Williams<sup>12</sup> used another term to describe the same porous mat of filamentous microorganisms found on teeth. He believed that all dental disease could be prevented if this plaque were removed daily. Black<sup>13</sup> was critical of Williams' supposition because "such coatings are found plentifully over the teeth of immune patients and in locations where there is no decay of enamel in persons with active dental decay." Black did not believe the location of plaque had any influence whatsoever on the location of caries.

Almost three-hundred years ago, Charles Allen<sup>14</sup> expressed the view that "decay of the teeth and gums is caused by some slimy stuff upon their superficies," but Keyes<sup>15</sup> of the National Institute of Dental Research concludes that few data have been published to document that long-term benefits can be attained by cleaning the teeth.

While there are no data to prove that plaque removal will reduce, much less eliminate, dental caries, Fosdick<sup>24</sup> demonstrated a 50-60% reduction of dental caries in individuals who brushed or rinsed thoroughly within ten minutes after each ingestion of food, when compared with a control group who brushed upon rising and retiring.

This was a two-year study, done twenty-three years ago, that has been corroborated, but never refuted.

It has been established that bacterial plaque on the teeth may cause gingivitis<sup>16</sup> and that when the plaque is removed, gingivitis may subside.<sup>17</sup> Gingivitis can be caused by many other things, but according to Ramfjord<sup>18</sup> the most frequent cause is dental plaque. Gingivitis has been prevented by oral hygiene in individual cases and in a selected group of individuals,<sup>17</sup> but two larger population group studies<sup>19-20</sup> failed to confirm this.

In the pathogenesis of periodontitis, sub-gingival retention of bacteria, associated with calculus and other surface defects, seem to be more important to the destructive disease than supra-gingival plaque. Several investigators<sup>21-22</sup> have found that plaque removal will not affect the progress of this disease, however, other researchers<sup>19-23</sup> have demonstrated that the periodic removal of all sub-gingival irritants, combined with plaque control may retard its progress.

#### DIET - FADS AND FACTS

Sucrose has been recognized for many years as the cariogenic culprit of our modern diet. Patients suffering from hereditary fructose intolerance avoid sweets of all kinds and experience little or no caries.<sup>25-26</sup> Increased frequency of between-meal eating of sugars has been correlated with increased caries activity by Bibby<sup>27</sup> but patients with high caries indices may have dental decay even though they consume little sugar.

Salivary lactobacilli counts were enthusiastically performed by many dentists thirty years ago. Patients with high counts experience much decay and both the number of bacteria and caries activity could be reduced by limiting sugar consumption, but few patients were willing to adhere to the restricted diet necessary.

Keyes<sup>28-29</sup> and others have demonstrated that streptococci and other micro-organisms are also factors in dental caries, but sucrose is still essential for the process. Unfortunately, increased knowledge of the bacteriology involved in dental decay has not made the prevention of dental caries by dietary control any more practical.

Scherp<sup>30</sup> has suggested that sucrose might be replaced in the diet by a less cariogenic substance or that something might be added to mitigate the cariogenicity of simple sugars, but at present we have nothing to offer patients along these lines.

Nutrition has been emphasized in the dental curriculum for many years, but Ramfjord and his co-workers<sup>31</sup> concluded it is doubtful



that nutrition plays any role in the etiology of periodontal disease. The physical properties of a diet may have some effect upon plaque accumulation, according to the work of Egelberg,<sup>32</sup> but Lindhe and Wicén<sup>33</sup> were unable to prevent periodontal disease in humans by means of a coarse diet.

Dentists have paid lip service to nutrition through the years, but diet counseling is of little significance in the practical prevention of dental disease.

### FLUORIDES

Adequate incorporation of fluoride into the teeth remains the one thoroughly proved method of increasing the resistance of teeth to caries. Twenty-eight years of research and experience leaves no doubt that the fluoridation of drinking water will safely reduce caries by about 60% and yet only a little more than half of the nation's population, using public water supplies, receive this benefit.<sup>34</sup> Almost 80% of the population have access to public water systems and national fluoridation is a primary goal of the dental profession.

Charles C. Bass, who has been called the father of preventive dentistry, is an avowed anti-fluoridationist and has been instrumental in denying the citizens of New Orleans the benefits of this most thoroughly tested of all public health measures. He accepts the fact that fluoridation can reduce caries up to 60%, but insists it is unnecessary medication because his "Right Kind" of toothbrush and unwaxed floss will prevent all dental disease. Although the National Research Council attested to the safety of fluoridation many years ago, Bass is not sure it is harmless to other organs of the body and he is positive it causes periodontal disease,<sup>35</sup> a fatuous idea refuted by the scientific community.

Recent studies indicate that intensive topical application of fluoride can decrease caries by as much as 80%.<sup>36</sup> The elevated fluoride content of enamel lasted for at least twenty-three months without additional topical application or consumption of fluoridated drinking water.<sup>37</sup> The evidence gathered by extensive clinical studies, prompted the Council on Dental Therapeutics of the American Dental Association to certify two fluoride containing toothpastes as capable of reducing dental caries when used in a program of oral hygiene. And yet, we hear very little about either topical fluoride application or the use of a fluoride dentifrice from the preventive dentistry revivalists.

## OTHER METHODS OF PROTECTING THE TOOTH

In the 1920's, it was popular to drill the occlusal pits and fissures to form wide non-retentive grooves, or to prepare them with retention form and fill them with silver amalgam.<sup>38</sup> Both types of so-called "prophylactic odontotomy" soon lost favor with the profession. These surgical techniques were followed by an era during which many dentist applied silver nitrate to pits and fissures and this by a mild acceptance of Gottlieb's impregnation technique,<sup>39</sup> which employed a 50% solution of zinc chloride and a 20% solution of potassium ferrocyanide. All claims for these preventive procedures were testimonial in nature and when no acceptable data were obtained after a period of several years,<sup>40</sup> their advocates slowly disappeared into the woodwork of dental history.

To illustrate the frequent cycle of fads, almost thirty years later in 1951, Miller<sup>41</sup> recommended filling prepared pits and fissures with copper cement and as recently as 1964, Bodecker<sup>42</sup> suggested the eradication of fissures with a stone.

Today, some are optimistic about the pit and fissure sealants developed by Buonocore,<sup>43-46</sup> Roydhouse,<sup>47</sup> and others.<sup>48</sup> Eames<sup>49</sup> and Phillips<sup>50</sup> have both expressed reservations about the routine use of these materials in a preventive program. Most of them do not seal nor do they penetrate the depth of the tooth fissure and they could offer a protected environment for the development of caries. By isolating the area from saliva, they prevent the maturation of young enamel, which is only 60-70% mineralized at the recommended age of application. These teeth may be more susceptible at 18-21 years of age, after 12-15 years of protection, than they would have been at ages 6-11 without the application of the sealant. If a lifetime of protection is the goal, Kopel and Grenoble<sup>51</sup> have pointed out that extensive time and expense would be required to repeatedly apply the material, when compared with a simple Class I amalgam filling. They conclude, "documented, not intuitive, answers to many questions are needed before the public can be assured of the role of pit and fissure sealants in the prevention of caries in the occlusal surfaces of teeth." Interproximal decay, which results in much greater tooth loss, is not claimed to be affected by these materials.

## DESTRUCTION OF CARIOGENIC MICRO-ORGANISMS

In 1940, Hanke <sup>52</sup> reported at the 76th Annual Mid-Winter Meeting of the Chicago Dental Society that an organic mercurial solution arrested both caries and gingivitis in patients who faithfully held it in their mouths for two minutes once or twice a day.

Members of the prestigious Chicago Dental Research Club participated in this project and served as evangelists for a period of time before their enthusiasm waned.

Continuous oral administration of antimicrobial agents has been shown to suppress specific cariogenic bacteria in both rats and hamsters <sup>53</sup> and reduce caries by 90% or more. Humans, receiving penicillin daily by mouth for rheumatic fever or chronic respiratory diseases over a period of from two to five years, developed up to 69% fewer carious tooth surfaces than a comparable control group. <sup>54 - 55</sup>

A team of investigators in Denmark <sup>56</sup> were able to prevent plaque formation in the mouths of four dental students who used a 0.2% chlorhexidine mouthwash twice a day. One daily rinse did not inhibit plaque formation in all areas of the dentition of eight other students. Daily topical application of a 2% solution of chlorhexidine gluconate also completely prevented plaque in six additional students.

Chlorhexidine gluconate was found to have an affinity for hydroxyapatite tooth surfaces and salivary mucins <sup>57</sup> and its slow release from these reservoirs was believed to prevent bacterial colonization and the development of dental plaque. The human oral flora was only slightly altered by either topical application of chlorhexidine gluconate <sup>58</sup> or the use of a chlorhexidine mouthwash <sup>59</sup> and it appears unlikely that the inhibition of plaque formation is caused by a reduction in the salivary flora.

The plaque inhibiting effect in vivo of 11 antibacterial compounds was compared with their antibacterial activity against salivary bacteria in vitro and no correlation was evident. <sup>60</sup>

Researchers at the University of Oslo <sup>61</sup> tested two chlorhexidine containing dentifrices on 53 students for two months. The mean plaque index values of the groups using the experimental toothpastes were significantly lower than in a control group. No damage to the oral mucosa was observed, but brownish stains formed on many tooth surfaces and silicate fillings.

In a study of 50 soldiers using chlorhexidine mouthwashes for four months, <sup>62</sup> 12% of the tooth surfaces and 62% of the silicate



fillings were discolored. Thirty-six percent of the test persons developed discolored tongues and some desquamation and soreness of the oral mucosa were observed. It was concluded that chlorhexidine mouthwashes should be used for short periods, but unfortunately they inhibit plaque formation for only about 24 hours,<sup>56</sup> so to be effective they must be used continuously on a daily basis. No antibacterial agent can be recommended to dental patients at the present time.

#### PATIENT MOTIVATION AND ECONOMICS

A letter to the editor of the Cleveland Dental Society<sup>63</sup> conjectured that most restorative oriented dentists feel threatened by the preventive movement. I sincerely believe most dentists want to prevent dental disease, but if all of our preventive measures work, and I hope they do, we cannot prevent what already exists. There will still be more restorative work than we can accomplish. Rather than deterring, economics is stimulating prevention in private practice. Many of the leaders of the preventive revival state unabashedly from the podium that once they hain the patient's confidence by expressing an interest in preventing future dental disease, it is easy to obtain his permission to perform the presently needed restorative treatment. In other words, by dedicating themselves to prevention, they have been able to build large restorative practices.

But this is not new. At the beginning of the great economic depression of the 1930's, Thomas Hartzell<sup>10</sup> wrote in the Journal of the American Dental Association, "Some dentists may reason that to teach the patient to apply these preventive principles effectively will reduce the work of the dentist to such a degree that it will operate as an economic loss. On the contrary, every patient who is taught how to maintain his own health is so grateful that ordinarily he sends to the dentist much more work to be done for other persons than his own work could possibly amount to."

The fees charged by many dentists for instructions in preventive dentistry do not force an economic loss, particularly when the service is rendered by ancillary people. I do not question that the service is worth a fee, but most dedicated dentists have been giving basically the same instructions to their patients for years as an essential, but not principal phase of dental care.

Certainly, patients should be given instructions in oral hygiene and any other preventive measures that have been proven beneficial, but our expectations and demands of patients must be reasonable. If

people will not lose weight, stop smoking or drinking, will not obey the speed limit, when they know all these things can kill them, how can we expect them to be too inconvenienced in order to just keep their teeth? And, if they cannot or will not do as well as we like, it is still our responsibility to treat them to the very best of our ability.

### CONCLUSIONS

In conclusion, permit me to enumerate four things about the preventive dentistry renaissance that have alienated many dentists. First, is the commercialism of the movement by some of its leaders and many of their followers.

Second, is the unwarranted indictment of dentistry for its failure to teach and practice prevention in the past, when in reality our profession has been preventive oriented all along.

Third, is the fraudulent claim that there has been a breakthrough in this area of knowledge and that most of the procedures being recommended are innovations, when in reality most of them are from twenty-five to seventy-five years old.

And lastly, are the unsubstantiated claims and promises, some of which border on the unethical, that are being made to many patients.

The dentist across the hall may not have a phase microscope, a plaque control room, or even an educational film strip synchronized to a taped message in his reception room. To some of you, he is an outmoded, obsolete practitioner. And to him, some of you are hucksters. I hope you're both wrong.

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I would like to express my appreciation to Dr. Paul H. Keyes of the National Institute of Health, Dr. Sigurd P. Ramfjord of the University of Michigan and Dr. Sidney B. Finn of the University of Alabama for their help in reviewing the literature for the preparation of this paper.

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# Prevention Revisited:

## A View From Academe

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The rampant zeal for preventive dentistry, so apparent in recent years, appears to be settling into a more controlled and introspective phase. Evangelical fervor is being replaced by a healthy enthusiasm which permits and encourages self-examination and self-criticism, and seeks to build a scientifically valid discipline.

This change was observed at the 1973 convention of the American Society for Preventive Dentistry, and through clinical experience at the Fairleigh Dickinson University School of Dentistry. The A.S.P.D., meeting in San Francisco in July, devoted a morning to a panel discussion of "Prevention: Fact or Fad?" and presented a wide spectrum of opinion, in which the Emperor was depicted as not quite naked, but hardly the epitome of sartorial elegance. This diversity and self-examination was not evident at the 1972 convention.

Another interesting aspect of the 1973 meeting was a new emphasis on nutrition as an essential component of dental health. Plaque control is no longer regarded as synonymous with preventive dentistry, as some "evangelists" of a few years ago suggested. The sessions on nutrition were well attended, and audiences showed interest beyond the elementary level of counting sugar cubes or Cokes.

The most significant change in the preventive dentistry movement is the growing appreciation for the need to study and understand psychology and other behavioral changes in their patients. Anyone attending this A.S.P.D. convention who felt that he or she had mastered concepts of plaque control, fluoride therapy, nutrition, and

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patient education techniques, realized there is much more to total preventive therapy, and that the glib term, "motivation," masks a complex and sophisticated science which is difficult to comprehend, and even harder to apply effectively.

#### EDUCATIONAL PROGRAM IN PREVENTION

The Fairleigh Dickinson University School of Dentistry has had a Department of Community and Preventive Dentistry since 1970, and a full-time Director of Preventive Dentistry since 1972. In this three-year period, changes in teaching, that parallel the changes seen in the A.S.P.D., can be discerned.

For example, the pediatric dentistry curriculum has always taught and encouraged fluoride therapy, and the periodontics curriculum has always stressed the importance of home care. At first, the new Department created a lecture series and a clinical program emphasizing preventive pedodontics and preventive periodontics, and added concepts of motivation, i.e., attempting to convince patients that they could achieve and maintain oral health through their own daily efforts, and teaching and encouraging them to do so.

The faculty realized that if preventive dentistry were to be accepted as a valid discipline, its therapeutic claims must be justified. Educators would have to discriminate between unsubstantiated, ephemeral ideas that were seeking acceptance by the profession, and sound, carefully documented research. The Department set out to do this.

A thorough review of the literature on available indices resulted in the adoption of a modification of the Navy Plaque Index<sup>1</sup> for use in our preventive dentistry program. Students still emphasize goals and measurable progress to their patients, but this is now reinforced by clinically reliable indices. Warnings to patients against excessive sugar consumption and frequent snacks have been replaced by a more rational, structured technique of diet counseling, in which student performance can be clinically observed, documented, critiqued, and evaluated. "Motivation," took on new meaning as students glimpsed the factors responsible for what Nizel calls, "the *why* of the diet."<sup>2</sup> The Department is planning to evaluate the efficacy of its diet counseling by measuring changes in patient behavior resulting from diet counseling sessions conducted by students.

The maturing of the Preventive Dentistry program has helped students to realize the role of prevention in all aspects of dental treatment. Conscientious restorative dentists have always emphasized



plaque control and oral hygiene. However, in the mad dash for gold inlay and crown and bridge requirements, students lost sight of these important relationships. As a result of the new preventive dentistry curriculum, they began to ponder the wisdom of placing gold inlays and crowns in mouths that were bathed in soft drinks for six hours a day, and in which they could see, via disclosing solution, that three-quarters of the surface area of the teeth were covered with plaque.

As a result of being asked to determine what their patients' attitudes, perceptions, and goals are, students are discovering why patients reject proposed treatment plans, fail to complete treatment, and repeatedly break appointments. They have found that patient management, even the administration of anesthesia and application of rubber dams, is easier when the rationale and goals of treatment are explained to patients. The disparate elements of dentistry, isolated and remote to many students (even in a curriculum that eschews blocks, and demands total patient care from each student), have been drawn together, illuminated through self-discovery, and brought into focus.

#### INTEGRATED APPROACH

The current preventive dentistry curriculum at Fairleigh Dickinson reflects these changes in emphasis; integration is proceeding rapidly among the various departments. The new Behavioral Science course, coordinated by the Director of Preventive Dentistry, and offered to Sophomores in their final pre-clinical semester, is taught by a team of dentists and psychologists. A pediatric dentist, a prosthodontist specializing in T.M.J. dysfunction, a medical sociologist, as well as other dentists, participate in panels and seminars in the course. The psychologist teaching the Behavioral Science course also lectures in the Department of Oral Surgery's Anesthesia and Pain Control course for the Sophomores.

At Fairleigh Dickinson, the teaching of the theory and practice of preventive dentistry occurs in the early part of the Freshman year. The subtleties and complexities of preventive dentistry lie not in grasping the agent-host-environment concept of disease, or in applying the specific therapies directed at oral disease, but in coordinating them with the more sophisticated areas of dental practice and in understanding patients and their psychology. In the latter half of the the first year, students are given an opportunity to apply their knowledge and skills in a clinical environment.

The principles underlying these applications were formulated decades ago. Many senior faculty members, smiling indulgently at the missionary zeal of the younger "prevention-oriented" dentists, have been practicing this way for years. But if the evangelists of prevention, hop-scotching the country from lecture to lecture, are responsible for this rededication, then "Amen!" and more power to them. If they have been able to fire the enthusiasm of indifferent students and dormant dentists, and to stimulate others to construct responsible bodies of knowledge, then they have earned their fame.

### CONCLUSION

Preventive dentistry is now in a period of self-analysis and maturation. The changes in three A.S.P.D. conventions and in almost three years of departmental activities at Fairleigh Dickinson illustrate this. Prevention has always been an integral part of clinical practice, and is reminding students of this, while expanding its horizons to include psychology and nutrition. Preventive dentistry must now face skeptics and critics; it was "re-discovered" in a burst of enthusiasm, but the honeymoon is over. Advocates of preventive dentistry must discard fads and gimmicks, and adopt valid concepts and practices of proven merit. They must conduct carefully designed and thoroughly documented studies to demonstrate that their therapies are effective in reducing oral disease on a long-term basis. Otherwise, the much heralded renaissance of preventive dentistry will have proved little and contributed nothing to the profession of dentistry.

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# Some Observations on Dental Education\*

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Careers in the health industry can offer a special fulfillment in life. Perhaps those of us in the health professions do not think about that as often as we should. In 1778, Thomas Jefferson wrote that, "Without health there is no happiness. An attention to health then should take the place of every other object." That priority has remained fixed in both the private and public values of our society through generations of Americans since. Our rewards have been immeasurable because "an attention to the health" — of others and of the community and of the nation contributes to the vitality and efficiency of our society as well as to the happiness and prosperity of our people.

In this momentous time to be living, we are privileged to contemplate new horizons of advance in health and scientific achievements. Exciting as these prospects are, we must, however, give first attention to our opportunities for personal service and our obligations for advancing the nation's health. For the health of the people is, inescapably, the foundation for the fulfillment of all our aspirations.

The art and science of dentistry, and the organization of the profession in the United States is the most perfected in the world. American dentists, with a few exceptions, are highly dedicated and moral men. And American dental education is rarely matched, let alone surpassed, in any other country.

The productivity of our dental manpower continues to increase and its potential for future growth is promising. Most encouraging of all is the recognition by more and more dentists that continuing education is always an unfinished task.

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Yet there is a darker side to dental practice and education in America: indifferent attitudes of some dentists toward the maldistribution and inaccessibility of dental services; lack of concern over the unmet dental needs of large segments of the population; arrogance toward third party payment systems; resistance to effective peer review proposals; and reluctance to change in every sector of dentistry. Finally there appears to be a growing complacency, or dry rot, infecting middle age members of the profession. It is a shoulder-shrugging, "what-the-hell" malaise, lack of interest in organized dentistry and the public which it serves. These are the dentists who take for granted the education they received and who snobbishly ask, "What did the American Dental Association ever do for me? They just take my dues and that's all. Why doesn't the Association protect us from governmental programs, insurance companies and price controls?" Many of you have encountered the type I refer to. Fortunately for all of us, the younger generation of students and dentists appear to be more responsive to the problems of society. The young ones have demonstrated a sincere concern for what ails the health industry and they want to help set things right — or at least improve them remarkably.

#### PERSPECTIVE ON THE PAST AND PRESENT

With that backdrop of both optimism and concern, allow me to reflect on perspectives of dental education — past and present. In most dental schools as recently as 1960 dentistry was taught according to a tract system rigidly divided into departments. Although that system is still the mode of dental education in many schools today it is rapidly being changed. Basically the tract system is designed to make things easier for the faculty. The students' learning experience is divided into departments, the mouth is divided into units, and the patient is considered a problem. How clever! All the patient has to do is hope that he has the type of problem the student needs. All the student has to do is find the right combination of units. All the instructor has to do is wait for the student, dragging his patient along, to rotate through his department. Then after four years, all the graduate has to do is put it all together.

During this guild-like training, and accompanying pressures, the student hardens his attitude toward the system. These observations are confirmed by a number of behavioral studies of attitudes of dental students.<sup>1-2-3</sup>

Fortunately, the tract system in dental education is being replaced by more logical and more flexible programs in which students treat the whole patient as they would in private practice and they progress through the curriculum at a pace governed by their ability. New dental schools recently built and older ones which have been modernized reflect improved teaching methods in the design of the curriculums. However, updating the instructors and department heads is more difficult than modernizing buildings.

The most important single influence that has brought about recent changes in dental education is federal money. Today every dental school in the country receives substantial support and operating funds through federal grants and contracts. Without those funds nearly every dental school would be forced to close its doors. Even with those funds about a dozen schools now operate on budgets that are precariously marginal. As a result of federal monies, major construction of dental teaching facilities has been accomplished; the number of students has been substantially increased; new programs have been introduced; television, computers and teaching machines are used extensively along with other new teaching methods; whole new curriculums have been designed; and new programs to train dental hygienists, assistants and laboratory technicians are in operation. In addition, federal loans and scholarships are available for dental and auxiliary students. All of these developments have occurred since 1960, and they have resulted from the federal carrot and stick technique. Whether or not these programs are good is difficult to judge, but certainly there is more good news than bad news and without federal help there would be little new news at all in dental education.

#### PERSPECTIVE ON THE FUTURE

If the preparation of dental students is to be improved and strengthened for the real world of today and tomorrow, the philosophy of the faculties and the curriculums of the schools will have to undergo major change. That will be difficult. As the expression goes, "Any jackass can kick down a barn, but it takes a carpenter to build one." Among the changes I think are needed are the following:

1. The concepts of preventive dentistry should permeate the entire curriculum.
2. The efficient utilization of auxiliaries performing expanded functions should be an extensive feature of dental education.

3. Students should learn in small groups how to work together as they would in a private group practice.
4. Dental schools should operate prepayment programs for students of other colleges in the university. These programs should include all the elements of peer review, fiscal accountability and evaluation and be administered by students operating a miniature dental service corporation.
5. Dental schools should provide clinical experience for students in the community by operating extension clinics outside the school.
6. Repetitious piecework and procedures rarely used in private practice should be reduced or eliminated.
7. Students should receive information on all types of dental insurance, dental partnerships and practice incorporation.
8. There should be increased emphasis on personnel management, tax law, office layout and design, patient education, biostatistics, dental economics, and small business administration.
9. There should be at least one course on health and the political process which would cover dental aspects of national legislation, and
10. All schools should adopt and implement policies that will help students become learned men who recognize the essentiality of continuing education.

Such changes as these cannot be made without breaking down long established ways of thinking. Most of us have learned to resist new ways of doing things rather than learning how to bring changes about.

By and drawing on the preceding observations, I conclude that the education of dentists in America happens to be the best there is. Also I presume that the quality of dental care in this country equals or surpasses dental care anywhere. But I also think that the time has come to review the system, content, inadequacies, sequence and climate of our dental educational effort as to its relevance and as to its meeting the needs of all the people of our land.

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# Keeping Up With Significant Issues in the Literature

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There is an ever enlarging and seemingly endless number of professional and proprietary dental publications produced each month. Keeping up with one's reading has become an increasingly difficult task for the intelligent dentist. Added to the burden of reading is the need to take continuing education courses, and attend professional meetings and conventions, in order to be aware of the many changes rapidly taking place in dentistry.

Along with the need to keep up to date with the changing techniques and administrative developments in our profession, there has, in recent years, been added the necessary understanding of the quixotic forays by government, labor unions, and insurance companies into the health care field with resultant increasing effects on the private practice of dentistry. Prepaid groups, closed panels, schedule of allowances, dental service corporations, medicaid, expanded duty auxiliaries and reams of red tape and never ending forms have come to occupy the practitioner's thoughts as much as the major innovations in prevention and the technical aspects of dental health care.

There is no question that these latter forces could bring havoc upon the health professions if left to develop without understanding and proper direction. Yet in the face of these growing forces for change within dentistry, it seems almost anachronistic that so little attention is paid to them in the traditional professional literature. While it seems that such topics are almost "beneath the dignity" of the professional journals, the proprietary publications sensationalize these encroachments on the prerogatives of the health professions as though they were the happenings in the morning tabloids. This lack

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of consideration by the traditional professional publications is more than amply demonstrated by the categorization in Table I of the original and special articles in the 1972 issues of the Journal of the American Dental Association and the journals of the specialties of the profession.

Of the almost 1,000 original and special articles published in the 1972 issues of the Journal of the American Dental Association and seven dental specialty journals, only eight (8) articles were related to the special problems of health care delivery — four (4) of which were in the Journal of Public Health Dentistry — and seventeen (17) articles were related to auxiliary personnel utilization — seven (7) of which were again in the Journal of Public Health Dentistry. While other investigators may identify various articles under different categories, there should be no question in the mind of any reader of the dental literature of the virtual dearth of presentations offering a broad perspective to the dental practitioner of the changing problems in the delivery of dental care from *the profession, the patient and the community viewpoint*.

It should be noted that many state and local society publications have performed a yeoman's task in helping to present to the practitioner the facts and concepts that are affecting dental health services! However, because these publications number into the hundreds and reach only a small segment of the profession, one cannot be assured of the consistency and the adequacy of the information offered in each of these journals and bulletins.

While one could argue that it is not the place for the American Journal of Orthodontics or the Journal of Periodontology to discuss such mundane things as the effects of prepaid arrangements or community discontent over health care — since these are in fact publications of scientific orientation to particular specialty segments of the profession — one cannot but consider such an attitude akin to the proverbial euphemism of the ostrich sticking his head in the sand.

Yes, interest in the analytic aspects of the delivery of health care tends to override attention to the nuances of the specific developments in the technical aspects of the profession. But while it could be argued that each specialty has its interests, it seems to this writer that the potential for significant consequences, as a result of consumer unrest, to the dental profession are so great that each specialist and generalist cannot but recognize the need for a thorough and unemotional analysis of the issues on the delivery of health care which seem destined to engulf dentistry.

Table I.

Summary of original and special articles in the 1972 issues of the Journal of the American Dental Association and seven dental specialty journals.\*

Subject area	ADA Journal	Am. J. Orthodontics	J. Public Health Dentistry	J. Dent. for Children	J. Oral Surgery	Oral Surgery, Oral Medicine, Oral Pathology	J. Periodontology	J. Prosthetic Dent.	TOTAL
Techniques, procedures, case reports and basic research	67	68	1	32	137	237	116	171	829
Prevention	16		10	10					36
Dentistry, dentists (books, schools and other countries)	20	1			1		5		28
Human interest type	21								21
Auxiliaries	9		7					1	(17)
Practice arrangements	3		5						8
Community needs and delivery of care	1		4	2					(7)
Behavior			8	3				1	12
Continuing education	3								3
Quality			2						2
State Boards	2								2
ADPAC	1								1
Prepayment	1								(1)
									967

\*It should be noted that this summary does not include editorials, short announcements, book reviews, committee reports and other general sections of the particular journals.



The view has been expressed too often that the proprietary journals are read more often than the official publications of the profession to dismiss this impression as though it were totally absurd. It may well be that the practicing dentist has turned away from the traditional organs of his profession because:

- a. they do not pay sufficient attention to matters which are his major concern.
- b. he is so inundated by traditional publications that he has sought relief, or
- c. the official publications have continued a format which is no longer viable in today's professional world.

In an era when our children are using all sorts of teaching machines, computer aided instruction, and whatever else school taxes are used for, it seems paradoxical in the health professions to continue the time consuming scholarly form of paper presentation in *all* our journals. Such an orientation virtually assures that many (or most) readers will either skip the manuscript or review the material in the time honored "hop and skip" approach of reading — starting with:

- a. the title and the editor's cryptic words of introduction, then
- b. the conclusion, then
- c. the discussion, then
- d. the introduction, and rarely if ever
- e. the methodology and the review of the literature

In honesty, such an approach to the literature seems rational as the private practitioner tries to find time to keep up with the significant issues in the literature, by wading through the verbiage prescribed by academic tradition.

This is not a plea for mediocrity. On the contrary, our system of perpetuating the fiction that the private health provider has both the time and inclination to meander through "pearls of wisdom" straight-jacketed in scientific and academic hyperbole has led to the inglorious situation where many practitioners are uninformed or ill informed over issues which will profoundly affect our profession.

The effort should not be made to convert our professional journals into another series of Reader's Digests; rather we should seek to change the format of some of these publications to take into consideration the realities of the world within which we practice our profession. For example, as a member of the American Dental Association, we automatically receive along with our membership a subscription to the Journal of the American Dental Association, but

must subscribe separately to Dental Abstracts. Human nature being what it is, one tends to stick with that which comes automatically rather than spending the extra effort (and money) to get something special. If, for the sake of discussion, we can assume that the private practitioner does spend time *thoroughly* reading the five to ten original articles in a monthly issue of the ADA Journal, would he not be better off reading — in the same period of time — the scores of presentations in a publication comparable to Dental Abstracts. If he was interested particularly in one or more of the manuscripts, or he was motivated academically, he could subscribe to a journal or a library packaged program which detailed the particulars of the material that had been abstracted. Simply stated, the official Journal of the ADA would follow the format of Dental Abstracts, but would include the current quota of advertisements to assure its economic viability.

There are no doubt many arguments which can be raised why this or any other radical change in the traditional presentations in the literature directed to the practicing dentist cannot be made, but before one expresses complacency with the current system of presentations, we should ask ourselves when was the last time we and most of our colleagues in private practice *really* read all the articles in the official publications in the way that they were written and not in the "hop and skip" approach!

Keeping up with the significant issues of health care is a time consuming obligation that each of us assumed when we entered our profession. Isn't it about time that we attempted to make it a little easier?

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## PREVENTIVE DENTISTRY: FACT OR FAD?

(Continued from Page 224)

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Marvin Revzin of Encino, California has received the Chong My Merit Medal, First Class, and the Vietnam Council on Foreign Relations Medal from the Vietnamese Government, in appreciation for his services as director of a project to upgrade dental education in Vietnam.

Sidney I. Silverman received the New York University College of Dentistry Alumni Association achievement award recently.

Harry Roth was the recipient of the New York University Alumni Meritorious Service Medal at the annual commencement exercises in June.

Colonel Raffaele Suriano, Deputy Chief of Staff for Personnel at the U.S. Army Health Services Command, received the Oak Leaf Cluster to the Legion of Merit during recent retirement ceremonies at Fort Sam Houston, Texas. Dr. Suriano has accepted the position of dean of Loyola University School of Dentistry in Chicago.

Dr. Russell I. Todd of Richmond, Kentucky has received the honorary degree of Doctor of Science at the commencement exercises of Eastern Kentucky University, for his "deep commitment to excellence in the quality of his personal and professional life."

*SANTA FE DENTIST HONORED*

*Dr. Ralph Lopez, left, founder of the Lopez plan for education for dentists, received a recognition plaque at the New Mexico Dental Society meeting recently in Santa Fe. Dr. Lopez was presented a plaque by Dr. Tom Spier, middle, President of the New Mexico Dental Society. Also present was Dr. Louis A. Saporito, right, President of the American Dental Association.*

The honorary degree of Doctor of Humane Letters was conferred on L. Deckle McLean, president of the New Jersey Dental Association by the College of Medicine and Dentistry of New Jersey at its recent commencement convocation in Jersey City.

At its recent annual meeting in Beverly Hills, California, the American Academy of Pedodontics elected officers for the coming year. Norman H. Olsen, dean of Northwestern University Dental School, is president; Robert I. Kaplan, of Cherry Hill, New Jersey, president-elect; Theodore C. Levitas of Atlanta, Georgia, vice president; J. Sanders Pike of Atlanta, Georgia, secretary-treasurer; and Thomas K. Barber of Palos Verdes, California, editor. Currently serving on the Board of Directors are James J. Leib of Encino, California; William S. Kramer, Lincoln, Nebraska; Spencer N. Frankl, Boston, Massachusetts; and Dale F. Redig, San Francisco, California. Benjamin Kletzky of Denver, Colorado is parliamentarian.

Victor H. Frank of Philadelphia received the Man of the Year Award from the Pennsylvania Dental Association at its annual meeting in May.

George E. Mullen of Brooklyn was elected president of the New York Dental Service Corporation.

Max Bramer was named to the Chicago Senior Citizens Hall of Fame for "outstanding leadership and service."

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*Fame is a vapor, popularity an accident, riches take wings. Only one thing endures, and that is character.*

*Horace Greeley*



## *The Objectives of the American College of Dentists*

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

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

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

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

(d) To encourage, stimulate and promote research;

(e) Through sound public health education, 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; and

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

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

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