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# Journal of the American College of Dentists

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## Mission

The *Journal of the American College of Dentists* shall identify and place before the Fellows, the profession, and other parties of interest those issues that affect dentistry and oral health. All readers should be challenged by the *Journal* to remain informed, inquire actively, and participate in the formulation of public policy and personal leadership to advance the purposes and objectives of the College. The *Journal* is not a political vehicle and does not intentionally promote specific views at the expense of others. The views and opinions expressed herein do not necessarily represent those of the American College of Dentists or its Fellows.

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

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**Cover Photograph:** Photographer Jon Draper captures surgeons contemplating a tool of their discipline.

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## From the Editor

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### Concerning the Current High Demand for Snake Oil

Dental practice is inherently a profession only; it is a business in an accidental and derivative sense.

According to marketing guru Jay Conrad Levinson, the most persuasive words in America include: “free, money, you, easy, guaranteed, you, secret, fast, and you.” The impression is one of rather self-centered, acquisitive individuals eager to line up for snake oil or an extreme make-over—provided the line is very short.

I object to some of the new glossy publications in dentistry. I have to rotate the pages as I read to reduce the glare. Ask yourself, who do the advertisers think would believe these claims of “free, money, you, easy, guaranteed...?” Perhaps they are intended for someone you know.

The current concern over snake oil is a demand-side phenomenon. The nightly news shows bombings and drive-by shootings in Iraqi and American cities because that is what the Nielsen polls indicate viewers want to see. Stories about volunteers and successful self-help programs in Iraq and the city where I live, although probably many times more common and beneficial to the soul, are not in demand. As America gets fatter, we ogle beautiful people and discuss diets.

Enough of that! It would never happen in dentistry. Remember the fears in the 1970s that fluoride (which a lot of people don't seem to want) would have a negative impact on the dental

profession? For the past fifteen years, the incomes of dentists have risen at about twice the GNP because dentists shifted to give the public what they did want—oral (health) care, with “health” in parentheses. In surveys of recent graduates of the school where I teach, elective care and replacing work that somebody else did are the fastest growing parts of the practice profile. Diagnosis and prevention and initial restorations are on the decline. Some dental magazines are based on the marketing concept that a group of patients who are in reasonably good oral health want aesthetics, smile designs, and startling whiteness—all in a painless, pampering spa environment—while the group of patients with the greatest need for oral health care are not interested in getting it on the terms currently being offered.

The defense in media, politics, grocery stores, and a segment of dentistry is “I am just giving the public what it demands.” We need to look carefully at whether it is a sound argument for dentistry to follow public opinion rather than lead it.

The man who created the quality movement in America, W. Edwards Deming, ought to be worth hearing on this topic. Would he favor grounding quality in market demand? It would seem not: “A product or a service possesses quality if it helps somebody and enjoys a good and sustainable market.” Interaction with customers must touch



basic needs and not just surface wants. He argued at length that customers (even in the entertainment and other service areas) do not know what they want; they select from what is offered and are guided by what they are told by those who should know. Deming takes a decided supply-side perspective on quality. The notion that patients should determine what services are offered in a dental office would have been repugnant to him. Quality has a moral dimension.

It is frequently noted that dental practice is both a profession and a business. This is a dangerous and self-serving distortion. Dental practice is inherently a profession only; it is a business in an accidental and derivative sense. First, it is clear that many dentists are salaried; many others donate their professional services. In several papers in this journal, I have defined practice as the semi-customized work performed for a client to standards of effectiveness, predictability, and beauty acceptable to one's peers. The ethicist Alistair MacIntyre uses practice in much the same way, although he extends it to jobs, roles, and customs generally. MacIntyre's powerful contribution is to note that ethics only makes sense within practices. Ethics is not a theoretical construct; it is grounded in specific settings. He goes on to say that ethical violations are deviations from the behavior essential to the practice undertaken while holding oneself out as a practitioner. Failure to diagnose because of incompetence is unethical, dismissing patients with crowns that

don't seat is unethical, influencing patients (even subtly) to accept anything less than optimal care is unethical. The offense is practicing dentistry while omitting behavior essential to dental practice.

MacIntyre distinguishes essential from accidental characteristic of practice. The fact that most dentists sixty years of age or older are men is an accident. The fact that dentists are in the top few percent of incomes in America is an accident. The fact that many own their own business is an accident. These characteristics may apply, but they are not part of the definition of what it means to practice dentistry.

Now we come to the part that is admittedly disputable. I would like to live in a world where dentists practice ethically—meaning that they provide needed oral health care to the standards set by their peers. I prefer businessmen and businesswomen and friends who participate in open and fair markets. The first is absolute, the second a relative quality. Keeping the two distinct should reduce the clouds of ambiguity that have been trucked into the profession in recent years. It should also make it clear that I am a supply-sider. Quality in dentistry should be determined by what it means to practice oral health care and not by looking for good economic returns

in pandering to the wants of a small segment of patients.

My maternal grandmother had a favorite saying. When a situation was too far gone to be remedied she would say it was “too late for Herpecide.” The latter article was a patent medicine that could cure anything. Let us hope that the current bowing of the profession of dentistry to commercial interests is not too late for Herpecide.



David W. Chambers, EdM, MBA, PhD, FACD  
*Editor*

## Letters to the Editor



The commission was clear in stating that, "If forced to choose between their academic mission and their role as a safety net for the underserved, academic dental institutions must put more effort into their academic mission than in improving access."

### To Whom It May Concern;

The fall 2003 issue of the journal contains an editorial about several policy statements on oral health, including the 2003 report of the American Dental Education Association's (ADEA) President's Commission on Improving the Oral Health Status of All Americans: Roles and Responsibilities of Academic Dental Institutions. Dr. Chambers states a variety of views about rights and goods, ADEA's role in addressing access to oral health care, and the mandates of higher education. We want to respond.

The purpose of the ADEA commission report was to recommend activities and policies to guide the organization in future activities. The commission was comprised of national experts from dental education, private dental practice, the dental examining community, and healthcare policy. The commission availed itself of data and public opinion as found in such reports as *Oral Health in America: A Report of the Surgeon General*, *A National Call to Action to Promote Oral Health*, and a variety of other documents. The 2003 ADEA House of Delegates adopted limited sections of the commission report as policy. However, like many reports produced by commissions, task forces, and appointed committees, the report itself should not be construed as association policy.

The failure to distinguish between association policy and the commission's report leads Dr. Chambers to conclude:

"ADEA sees its role [in access to basic oral health care as a human right] as teaching cultural competency, becoming an alternative delivery system to private practice, requiring a mandatory year of training..." and so forth. At no point in the report did the commission recommend that ADEA engage in teaching or delivering patient care. ADEA policies support and encourage academic dental institutions to teach cultural competency. While the commission recommended a mandatory fifth year of education and service, ADEA does not have a corresponding policy. Neither the commission nor ADEA suggest that the association or academic dentistry become an alternative delivery system to private practice. While dental schools and other academic dental institutions play a critical role as a safety net for the underserved, the commission was clear in stating that, "If forced to choose between their academic mission and their role as a safety net for the underserved, academic dental institutions must put more effort into their academic mission than in improving access." Others cannot replace the defining academic purpose of dental schools and advanced dental education programs.

Based on the title of the editorial, we assume that Dr. Chambers' major objection to the report is the commission's argument that access to basic oral health is a human right. Dr. Chambers begins the editorial by stating that although

they sound similar, “rights are different from social goods.” He goes on to cite examples of social goods such as helmet and liability insurance laws and national security. We assume that Dr. Chambers gives access to oral health the same status as these social goods.

Contrary to Dr. Chambers premise, while rights and social goods are not necessarily the same, in some instances a right can be a social good and vice versa. To use the example of national security, most United States citizens experience national security not only as a social good, but also an entitlement based upon a social contract. The concern about intelligence failures prior to September 11, 2001, is more than a complaint about the violation of a social good; rather, the concern is that the United States government failed to provide its citizens one of their entitlements: national security. As a part of this social contract, citizens of the United States contribute through their taxes, their service, and sometimes their lives to the military, police, and other agencies that secure this right.

The “logic” of social goods and rights is not as uncomplicated as Dr. Chambers suggests. In addition to negative rights, “freedom from,” and positive rights, “entitlement to,” there are a number of other ways to think about and analyze rights and goods. For our present purposes, we elucidate the notions of rights and goods only to the extent necessary to clarify the commission’s position.

We have already noted that some instances can be construed as both a social good and a right. A common distinction between different rights is that of legal rights and moral rights. Sometimes the distinction between the two is vague. These rights sometimes conflict. Moral rights can become legal rights. Both legal rights and moral rights depend upon social rules. With legal rights, these rules are codified and the right is defined by explicit laws or judicial precedents. The United States has signed the United Nations Universal Declaration of Human Rights, a document that calls for universal recognition of the right to health care. Nevertheless, while one could argue that those qualifying for Medicare and Medicaid have a legal right to the benefits these programs provide, in effect, there is no general legal right to health care in the United States,

Like legal rights, moral rights are also based on social rules. In the case of the United States, these rules are defined in the context of the good society. Some of the basic tenets of the good society include life, liberty, the ownership of private property, the pursuit of happiness, and equal dignity of persons. The Constitution of the United States codifies these tenets as foundational in this good society (as civil rights, which are also legal rights).

Dr. Chambers gives examples of social goods, such as helmet and liability insurance laws. Access to health care, including oral health care, is different in two important ways from Dr. Chambers’ examples. In the good society, access to

The ADEA President’s Commission was unequivocal in stating that...academic dental institutions have played and should continue to play a central role in addressing this nation’s oral health needs.

health care is a necessary condition for the attainment of other rights and goods that define that society; whereas wearing a helmet is not. Secondly, access to health care is a necessary condition to human well-being for all—it is universal in scope. Although human choice can affect individual health and disease patterns differ, each human being is subject to disease and death regardless of his or her choices. While one may chose to wear a helmet for fashion, for protection, from paranoia about particulate matter, or other reasons, wearing a helmet is not universally necessary for the pursuit of other rights and social goods. To summarize, on the grounds of the good society, the necessity of a basic level of oral health as a prerequisite to other rights and social goods, access to basic oral health is a moral right. Because of

the universal nature of oral health—oral health is essential to a human qua human—the commission argued that access to oral health care is likewise a human right.

Dr. Chambers states about the dental profession: “Self determination is not the same a determining for society as a whole what is in its best interest.” We agree with this assessment. Self-regulated professionals do not legislate the rights of those who access their services. To do so is outside a profession’s responsibilities and constitutes a conflict of interest. Both Dr. Chambers and the commission observe that the corollary of a right is a duty. The commission argued that the dental profession, including academic dentistry, “as the moral community entrusted by society with knowledge and skill about oral health has the duty to lead the effort to ensure access for all Americans.”

An insular interpretation of the dental profession’s moral obligation translates that obligation into free care on demand. However, such an interpretation fails to consider that rights are *prima facie* entitlements. For example, one right can overrule another right of greater significance. The moral rights of the patient can and often do conflict with those of the healthcare provider. The language of rights and goods, like the study of ethics in general, invites debate and discussion as a means to reach clarity and pragmatic conclusions. The commission argued that the dental profession, including academic dental institutions, has the responsibility to lead this debate and discussion. The commission’s report concurs with Dr. Chambers’ observation that “dentistry has a proud tradition of public service.”

In addition to patient care, the commission maintained that the dental profession’s public service should include awareness of access issues, education, and advocacy so that the moral community of dental professionals can discharge its duty and those in need of oral health care can access care without barriers such as availability of care, ability to pay and lack of insurance, regulatory barriers, and systemic barriers within the healthcare delivery system. Access to health care, including oral health, is different from most social goods: it does not belong under the rubric of helmet and liability insurance laws.

Academic dental institutions are a part of not only the dental profession but also higher education. We are perplexed by Dr. Chambers’ assertion that, “serving as a labor force has never been a part of the university compact with society.” Public service has always been a mandate of the American university. There are myriads of examples: from tutoring children in low income areas to partnering with local chapters of charitable organizations, and from providing health care to the development of research parks, higher education serves the community. Campus Compact is an alliance of more than 500 universities and college presidents who are committed to the promotion of citizenship through public service. The Morrill Act in 1862 and the Hatch Act in 1887 brought universities into active partnership in the agricultural life of the nation. In the case of academic health centers and academic dental institutions, the service mission primarily takes the form of patient care.

We also find puzzling Dr. Chambers’ claim that advocacy has never been a part of higher education’s mandate. Most major universities in the United States employ advocates to educate policy makers in their states and on Capitol Hill. Education associations advocate

daily on behalf of their members.

Presidents of universities (and deans of dental schools) regularly engage state and federal legislators on behalf of their institutions. American universities have galvanized social change through education, debate, dialogue, research, and public service for centuries. As academic institutions, dental schools and other academic dental programs have a responsibility and an opportunity to educate policymakers for the betterment of American society.

Dr. Chambers surmises that politicians probably know the data on the burden of oral diseases and disparities better than dentists do. We believe that Dr. Chambers is wrong on this count. There is a growing problem of access to oral health care as clearly defined in a number of recent reports, most notably *Oral Health in America: A Report of the Surgeon General*. If the dental profession, including academic dentistry, does not address this problem, the politicians to whom Dr. Chambers refers will. They are already beginning to take action independent of the dental profession in some states. The ADEA President’s Commission was unequivocal in stating that through teaching, research, patient care, and advocacy, academic dental institutions have played and should continue to play a central role in addressing this nation’s oral health needs.

Sincerely yours,  
Frank A. Catalanotto, DMD, FACD  
Chair, ADEA President’s Commission  
on Improving the Oral Health Status of  
All Americans

N. Karl Haden, PhD  
Director, ADEA Center for Educational  
Policy and Research



## Editor's Note

It is not customary to publish letters that are twice as long as the piece that prompted them. After some discussion, Drs. Catalanotto and Haden felt they needed this length to make their points.

The editor offers the following comments:

There is no generally or even widely held position among ethicists that health, oral health care, or access to oral health care are rights. The ADA and U.S. Public Health Service reports discussed in my editorial do not make this claim. The fact that most dental disease is preventable by individuals or their families makes it a poor candidate for a universal entitlement.

If an organization is to take the leadership in advocating for improving oral health in America it had better be the ADA. For some members of the ADEA who cannot establish their views as policy in their own organization to take a position that obliges others (universal entitlements entail universal obligations) seems too bold.

Universities do advocate, as 501-c-3 organizations, for their own interests. They do not, however, have 501-c-4 status that permits them to lobby on behalf of others.

Helmet and liability insurance laws are positive rights in the United States—not the uninsured, helmetless, DUI's right, but mine, as a protection of my property.

Members of the academic community and the dental profession volunteer in the public interest, but that does not mean that they are obliged to do so any more than Give Kids a Smile makes the ADA a service organization.

It remains my position that the profession will do more to raise the level of oral health and extend its reach by enhancing and demonstrating the good it does for individuals and for society at large than by declaring their wish that someone should recognize it as a universal entitlement.

## Dear Dr. Chambers,

As a longtime advocate for adequate and affordable dental health in California, I would take exception to those who feel that their elected officials are insensitive to such needs. I, along with many of my colleagues, have long believed that the good that comes from improved oral health is often overlooked in many public health dialogues and have undertaken a number of reforms to raise the banner on this issue statewide. One of the most significant and contentious issues I have sponsored while in office was AB 733, now law, that requires the fluoridation of California's drinking water as part of the U.S. Public Health Service's national campaign to provide fluoridation to a majority of Americans in an effort to promote dental health, particularly among young children.

We need to take every opportunity to emphasize that good oral health is an important component of good overall health. Tooth decay and other oral health conditions are major economic issues in this nation—in California, they affect 90% of the population. We need a continued spotlight on this issue in order to have more leverage for promoting programs as budget and legislative policy negotiations allow.

I am one of many lawmakers who is committed to ensuring that dental health remains a top priority in health-care discussions.

Sincerely,  
Jackie Speier  
California State senator  
8th Senate District

## To the Editor;

Research from various areas has shown that disparities in access to oral health care and disparities in oral health status are growing. Oral health is embedded within the social fabric of American life. In the twentieth century manufacturing economy, oral health didn't contribute to one's success on the assembly line. But in the twenty-first century service economy, oral health contributes considerably to one's success (not to mention the ability to become employed) on the reception line.

Oral health in twenty-first century America is an economic development and human potential issue—it is a good valued by society. Data have shown that oral health has a positive impact on both the lives of individuals and on society generally. Fewer days lost from school or work, greater employability, reduced burden of disease on other organ systems, and reduced burden of care on other parts of the healthcare system are examples of the social good of oral health.

Innovative partnerships, alliances, and coalitions that include dental professionals, our health profession colleagues, policy makers, industry, and patient advocates will be required to eliminate these oral health disparities.

Linda C. Niessen, DMD, MPH, MPP  
Vice President, Clinical Education  
DENTSPLY International

## Oral and Maxillofacial Surgery— Character of the Specialty

Thomas W. Braun, DDS, PhD, FACD

### Abstract

Because of its similarities to other disciplines in dentistry and to medicine, the boundaries of oral and maxillofacial surgery are not easily defined. Some of the characteristics of the specialty include depth of the medical and biological knowledge of patients required, competitive selection and extensive training, hospital training and practice, and well articulated standards and support from its professional organization, the American Association of Oral and Maxillofacial Surgeons.

**D**entistry is a morphologically defined discipline of medicine. This is certainly not unlike specialties of medicine that are based on organ systems (cardiology, endocrinology), or based on their own geographical parameters (otolaryngology, ophthalmology). The fact that, in the United States, dentistry is a profession separate from medicine is in some ways an aberration, and the result of educational decisions made well over a century ago. On the other hand, dentistry in the United States is clearly excellent and offers substantial value to the population in terms of care and health benefit. Nonetheless, some of the vestiges of the separation of professions are apparent. These include the general orientation of dentistry toward clinical delivery of care, often in small office or group settings in which the dentist or dental team is entirely responsible for diagnosis, imaging, treatment planning, and delivery of care. In this setting, treatment outcomes may or may not be formally monitored and reviewed, and are rarely shared with colleagues.

### Defining the Specialty

In general, many of the specialties of dentistry are similarly defined. With the exception of the fifty-six dental schools that currently exist and those various graduate programs separate from dental schools in which collaboration is required as part of the educational

model, a critical preview of cases with discussion and deliberation of possible alternatives in advance of treatment among colleagues is often restricted to study clubs and other voluntary participation entities. While exceptions, of course, exist in each profession, medicine in general functions oppositionally to this model. Most physicians have hospital affiliations; and, while they may have small group practices with some internal diagnostic capabilities, medicine is increasingly defined by consultation and collaboration. Treatment outcomes are monitored in hospital committees such as utilization review, mortality and morbidity, quality improvement, risk management, tissue review, and so on. Hospitals, in turn, are reviewed by external accrediting bodies (JCAHO, State Department of Health, AAAHC). Third-party insurance carriers have an increasingly decisive role in diagnosis and treatment.

There are, however, specialties of dentistry which, by the nature of their training and subsequent delivery of care, conform more to the medical model. Oral and maxillofacial surgery is perhaps the most obvious but is not alone, in that oral and maxillofacial radiology and oral and maxillofacial pathology, although



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numerically smaller disciplines, may have comparable educational settings. As a specialty of dentistry, oral and maxillofacial surgery is perhaps most different from other specialties, and the individuals who practice and teach and study oral and maxillofacial surgery seemingly reflect this.

Generally, selection for residency in oral and maxillofacial surgery is highly competitive. This competition, however, is confined to a comparatively small number of individuals. In addition to the academic rigors imposed by most surgical residency programs, the discipline itself requires an extended period of time (four years minimum, up to seven years in many programs), with training that is comparatively longer and more arduous than most other specialties of dentistry. It is also a physically demanding specialty in terms of the delivery of clinical care. For these reasons, many individuals who choose to enter dentistry as a profession, because of its rather well-defined hours, unstrained work atmosphere, and substantial compensation, may not choose a specialty which generally requires long work hours, extensive documentation, comprehensive and repetitive review processes of credentials, increased malpractice risk, a call process which often requires immediate attention to emergency patients, and long, uninterrupted hours at an operating table performing physically difficult tasks.

Like all specialties of dentistry, the educational process is determined by the educational standards established and evaluated through the Commission on Dental Accreditation. All programs have an important hospital component based on the nature of the standards requiring extensive inpatient management and operating room experience. While all programs are a minimum of four years in duration, approximately half of existing

Many may not choose a specialty which requires long work hours, extensive documentation, repetitive reviews of credentials, increased malpractice risk, immediate attention to emergency patients, and long, uninterrupted hours at an operating table performing physically difficult tasks.

programs exceed that by one, two, or three years in order to simultaneously provide medical training and other research or clinical opportunities. At a minimum, however, the four-year trained oral and maxillofacial surgeon still has a threshold amount of medical background achieved through mandatory rotations in medicine, surgery, and anesthesia; with comprehensive understanding of anatomical and basic sciences, pharmacology, pathology, and ambulatory care. The hospital training environment provides a unique opportunity to the dental specialist, in that there is a reinforced system of collaboration and consultation, credentialing and certification based on demonstration of competency, consistent educational challenges, daily case presentations on rounds in which Socratic discourse occurs, and one-on-one mentoring.

Regular meetings, such as mortality and morbidity conferences or comprehensive case review conferences, require resident trainees to present prior cases, including treatment outcomes both positive and negative. This singular feature is in some ways anathema to the way much of dentistry is taught. While clinical dentistry expects perfection and may consider such things as pulp

exposures or failed restorations as somehow less than appropriate care based more on a value system of absolutes with good versus poor, oral and maxillofacial surgery, similar to other disciplines of medicine, recognizes that the biological system is defined by the human body. Clearly, biology has a substantial component, which is often variable, and requires the ability to adjust, adapt, and recognize that all complications are not failures of proper delivery of care. As an example, consider that a malunion of a repaired fracture or a postoperative infection is undesirable, but does not directly imply that inadequate diagnoses or care has occurred. Similarly, patients may experience unpreventable anesthetic complications. These are, however, outcomes that, when discussed and reviewed with colleagues, provide insight into improved care for future cases.

In addition to the constant analysis of outcomes, oral and maxillofacial surgeons have strong organizational support from their specialty organization, the American Association of Oral and Maxillofacial Surgeons (AAOMS). This recognition and generally high level of participation in the organization has permitted an ongoing and strong collaborative effort on behalf of the specialty. For example, several years ago *Parameters and Pathways: Clinical Practice Guidelines for Oral and Maxillofacial Surgery* was developed by the AAOMS and is now in its third version. This comprehensive document deals with nearly all of the procedures provided by oral and maxillofacial surgeons, and defines indications for therapy, therapeutic goals, identified

*Parameters and Pathways: Clinical Practice Guidelines for Oral and Maxillofacial Surgery* was developed by the AAOMS. It serves as a significant aid in determining the boundary between normal biologic variation and negligent or inadequate care.

risks and complications, and generally accepted modes of treatment. It serves as a significant aid in determining the boundary between normal biologic variation and negligent or inadequate care. Among other initiatives, the organization has also developed a comprehensive manual which assists in determining the readiness and adequacy of the office-based practitioner to deliver anesthesia care (*The AAOMS Office Anesthesia Evaluation Manual*). It, too, addresses the variability of biologic responses in patients.

The American Board of Oral and Maxillofacial Surgery (ABOMS) provides evidence to credentialing institutions such as hospitals, insurance carriers, and governmental institutions and to the public that minimal levels of education, experience, and knowledge as determined by the board examination have occurred beyond the predoctoral

curriculum. As board certification is required by virtually all hospitals, and because most oral and maxillofacial surgeons maintain hospital privileges, there is a high level of correlation of the number of individuals who have completed their residency training to those who have achieved board certification. The fact that board certification is also required for many insurance carriers is an additional impetus. The board certification process reinforces the practice of continual education with critical case review, Socratic discourse, critical thinking, and review of adverse outcomes; and it is further demonstrated in the mandatory recertification process every ten years.

As a group, the oral and maxillofacial surgeons have established a national insurance company (OMSNIC), which is owned and driven by the specialty, with each participant a share holder. In addition to providing malpractice insurance, it offers risk management and other educational supplements that assist the surgeon in critical analysis of cases. This initiative, separate from its economic impact, has been a self-created and self-directed system to elevate the practice and the level of care through risk management and ongoing educational efforts.

In general, there appears to be a substantial difference in the type and manner of training of oral and maxillofacial surgeons when compared with general dentists and other specialties. Constant collaboration is required with other members of the specialty; with specialty-related organizations; with referring dentists; with hospital-based specialists, such as radiologists, anesthesiologists, surgeons, and physicians; through ongoing participation in case reviews; with outcomes presented, both desired and undesired; and the recognition that patients are biologic entities that may respond differently.

## A Unique Specialty

The specialty is occasionally referred to as a “bastard” specialty, not generally considered disparaging but, in fact, a reflection that it is a specialty of dentistry which, in many ways, is closely aligned with medicine educationally and from the care delivery perspective. This interesting dilemma makes both the educational component and the subsequent practice of oral and maxillofacial surgery especially unique.

During residency and in the hospital, there is an ongoing educational process with medical colleagues as to what an oral and maxillofacial surgeon is and does. At the same time, this is done with our dental colleagues. As the other papers presented in this journal reveal, the specialty deals with such wide-ranging areas as cosmetic surgery and facial reconstruction, placement of implants, trauma management, care of pathologic states, management of cleft palate and craniofacial disorders, and, importantly, traditional dentoalveolar and office-based anesthesia related procedures. Patients of oral and maxillofacial surgeons are sometimes critically ill and die. Confusion about what OMS is and how it differs from dentistry and from medicine extends to state dental and medical boards, oftentimes the public, insurance companies, and even our own professional colleagues. That is a reflection of its identification with both dentistry and medicine.

As perhaps the oldest practice of dentistry, with “tooth drawing” and draining abscesses dating to ancient times, it is a specialty that continues to evolve and maintain its integral role in health care, perhaps heralding the future of dental education as dentistry becomes more closely integrated with medicine. ■



## Commentary after Thirty Years of Private Practice in Oral Surgery

James R. Cole II, DDS, FACD

### Abstract

Complexity and rapid development make oral and maxillofacial surgery the most unique specialty. From the perspective of thirty years of private practice, the author reflects on the necessity to blend science, practice, and business to meet patient needs. The special role of pain management is described. The change to oral and maxillofacial surgery that occurred roughly twenty years ago reflects the rapid expansion of knowledge, complexity of cases, and use of technology. Some of the issues that must be addressed in the future of the specialty include managing costs of education and practice with reimbursement trends, defining the scope of practice, and promoting research and technology and incorporating it in practice.

I began my practice in a less complicated time. All of us over sixty years of age understand that. I graduated from dental school believing I would become a prosthodontist. However, as nearly every dentist graduating during the height of the Vietnam War, I “voluntarily” elected to join the Dental Corps of one of our uniform services, in lieu of establishing or entering into an existing dental practice.

As a young Air Force dental intern, I was introduced to what seemed to me to be the most unique specialty in either dentistry or medicine. It was still titled oral surgery, and I could not wait to complete my three-year military obligation, gain acceptance into a residency program, and become one. After three decades in private practice, I remain convinced that I was right. This specialty still remains the most unique and interesting in all of health care. It comprises all elements of dentistry, as well as parts of anesthesiology, ophthalmology, otolaryngology, plastic surgery, orthopedic surgery, dermatology, internal medicine, and pathology.

The specialty has changed significantly from the time I completed my residency at the University of Oklahoma Health Sciences Center in 1973. Those of us in this specialty are privileged to treat and operate in a complex and fascinating region of the human body. It is one that is composed of nearly thirty individual bones upon which twenty-four muscles originate and/or insert. It has a bilateral arterial and venous system, twelve bilateral cranial nerves, as well as over fifty foramina and canals through which

these nerves, arteries, and veins pass. It has four bilateral paranasal sinuses. Two rather unique and interdependent joints are found in the region, as are three bilateral major salivary glands. We treat a region that allows us to masticate, communicate, breathe, taste, and smell. Our responsibilities as surgeons are to protect this region of our patient's body from infection, repair it to normal when traumatized or maldeveloped, and keep it functioning as it atrophies from age. We are accomplishing this in a far superior manner than ever before.

Our specialty has been served well by numerous unselfish individuals who initially laid the foundation stones upon which the specialty was built and who continue today to shape, mold, and nurture the dynamic changes that I have observed as a private practitioner over the past thirty years. There are a few who come to mind. Dr. Greene Vardiman “G.V.” Black became famous for his cavity preparation designs in operative dentistry. This self-taught dentist was also the first American to reduce and maintain fixation of jaw fractures by the use of circumferential wiring.



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Dr. William M. Adams was the first to propose what was until the 1980s the technique of treating facial fractures by internal fixation with stainless steel wire. Doctors James B. Brown, John B. Erich, and Harold D. Gilles made outstanding contributions to the surgical treatment of facial injuries during World War II. Dr. Thomas L. Gilmer revived the idea of treating mandible fractures via intermaxillary fixation. Dr. Kurt H. Toma was the author of the first comprehensive text on contemporary oral surgery, and co-author with Dr. Henry M. Goldman of a thorough oral pathology text printed at a time when the dental profession was demonstrating an ever-increasing interest in the subject. Dr. William H. Bell is a pioneer in investigating and validating the vascularization and bone healing in total maxillary osteotomies. Dr. Robert E. Marx continues his research in radiation pathology, bone science, and mandibular reconstruction. Dr. P. I. Branemark is known for his landmark work in osteointegration and dental implants. Dr. H.L. Obwegeser is an innovator in providing our specialty with a superior method to provide variable alternatives for elective osteotomies in the mandible. Dr. Daniel M. Laskin is an educator, researcher, advocate of our specialty, and editor of our specialty's journal, *The Journal of Oral and Maxillofacial Surgery* for the same three decades. Under his editorial insight, this journal accurately examines and documents this specialty's remarkable progress.

## Building a Practice

I left my residency training program well-qualified and committed to providing my patients with excellent care. Upon returning to Albuquerque to establish my practice, however, I soon realized that I knew little about practice management and maximizing the profits from the long hours of hard work that lay ahead of me if I was to be successful in building my practice. The first day I opened my office I exposed one periapical film and extracted a grossly carious lower left first molar, for which I received \$18.72. (The 72 cents was the gross receipts tax I collected for the state of New Mexico). That first year went well. I always managed to collect more every day than I did that first Monday morning in August 1973. In fact, after paying myself, and my two-person staff a fair salary, paying rent and my suppliers, retiring a forty thousand dollar bank loan for equipment, and making all my tax payments to the government, I had managed to make a first year profit of ten thousand dollars. That quickly became invested in a tax free Keogh account for my future retirement. By my third year, I was invited to join an existing two-man practice. We built a fifty-nine-hundred square foot building designed for and focused on outpatient ambulatory care. It was sited in a location that after thirty years still substantiates the original decision to locate there. The practice grew to a group of five and due to retirements, untimely deaths, and individual decisions to enter into solo practices has remained small. It recently became a four-man group, of which I am the senior partner.

During the ensuing years, I, my partners, and key staff have become well-versed in all the nuances of practice management. Mission statements, strategic plans, financial and tax planning, modern electronic records keeping, quality assessment, informed consent, predetermination criteria,

inpatient versus outpatient care philosophies, employee benefits, and pension profit-sharing mandates now take up a significant amount of time. I believe, however, that mastering this octopus called practice management was essential to success, and it has allowed my partners and myself the professional ability to ethically practice the full scope of oral and maxillofacial surgery in a modern, well-staffed, well-equipped facility and in a manner that is personally satisfying and financially rewarding to each of us and our staff.

The ability of oral and maxillofacial surgeons to more effectively manage pain than other specialists in dentistry and medicine has helped to define our specialty. We are identified by the special care we can provide for the fearful and anxious patient, and we are called upon multiple times daily to do it. The use of intravenous drugs for sedation and general anesthesia in an office setting to deliver oral surgical care in a safe and predictable manner has been a cornerstone of every private oral surgical practice. Although I was initially trained to use lidocaine in conjunction with the titration of two percent methohexital (Brevital), like the vast majority of my peers, I became more confident and comfortable with a technique that gained wide acceptance in the late 1970s and 1980s. It has become the preferred technique in office-based anesthetic practices today. The invention of diazepam (Valium) was the basis for this technique. It revolutionized office anesthesia, and oral surgeons soon began using diazepam (Valium) and meperidine (Demerol) to create a baseline level of sedation and then titrating methohexital (Brevital) to maintain the desired depth of sedation. Two percent lidocaine (Xylocaine) was used to provide profound conduction anesthesia via nerve blocks or infiltration. Blood

pressures were routinely taken and the patient was constantly visually monitored.

This technique has been modified and improved over the last twenty years. An expanded armamentarium of drugs and monitoring equipment has allowed IV sedation and general anesthesia to have an even more admirable safety record. Diazepam (Valium), midazolam (Versed), fentanyl (Sublimaze) and their antagonists flumazenil (Romazicon) and naloxone (Narcan), as well as methohexital (Brevital), propofol (Diprivan), and ketamine (Ketalar), are proving predictably safe sedation and anesthetic alternatives. Continuous monitoring of blood pressure, heart rate and rhythm, and oxygen saturation via electronic sphygmomanometers, EKGs, and pulse oximeters preoperatively, intra-operatively in our surgical suites, and postoperatively in a formal recovery room setting staffed by licensed RNs, allows our group private practice to effectively combat a hospital environment fraught with escalating costs, scheduling limitations, infection potentials, and time management issues. Over forty-five thousand IV sedation, deep sedation, and general anesthetics have been delivered in our office over the past thirty years with no morbidity or mortality. Pain management using IV drugs is now the largest profit center in our practice.

In 1975, the American Association of Oral and Maxillofacial Surgeons established an office anesthesia evaluation program. This singular program unique to our specialty now requires an on-site office evaluation every five years by peers in one's component society as a requisite for active membership. A high degree of compliance by AAOMS members assures the public that they are being treated in a properly equipped

office by a practitioner who is well prepared to manage emergencies and complications of anesthesia. It validates our specialty's commitment to provide the highest standard of care in out-patient anesthesia in health care today.

### A Rapidly-Expanding Specialty

Three decades have passed since I nailed my certificates to my office wall and realized that I had achieved my goal of becoming an oral surgeon. Now the common term is oral and maxillofacial surgeon. The change occurred sometime around 1982. The name reflects the changes that have taken place and the expanded interests of our specialty. Dentoalveolar surgery, facial trauma, oral pathology, and oral medicine (the main focus of my training) have witnessed increased emphasis on orthognathic surgery, cleft palate surgery, tempromandibular joint surgery, reconstructive surgery, dental implantology and facial esthetic surgery. Research within the specialty continues to explode into our literature, providing more scientific basis for our surgical procedures. Anecdotal observations are being replaced with evidence-based outcomes.

The corpus of knowledge in this specialty has expanded exponentially since I received my training. Pre-prosthetic surgery has abandoned vestibuloplasties, the lowering of the floor of the mouth, and split-thickness skin grafts and replaced them with biocompatible osseous integrated dental implants. Facial fractures are now surgically approached more frequently intra-orally rather than extra-orally. Twenty-four-gauge stainless steel wire has been supplanted by the plating system du jour. New biomaterials and an ever-increasing understanding of bone healing and physiology lend more credence than ever before to our repair and reconstruction of facial injuries and deformities.

Oral pathologists now routinely supplement their histopathologic microscopic reviews with additional tests, special stains, immunohistochemical assays, and even electron microscopic narratives. Flat plane radiographic films such as the routine posterior-anterior projection of the mandible, the lateral projection of the skull, the Waters projection, the modified Townes projection, or even a panorex must have a justification before radiologies consider it as a diagnostic tool. Instead, computed tomographic scans and magnetic resonance imaging are now the standard of

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This specialty still remains the most unique and interesting in all of health care. It comprises all elements of dentistry, as well as parts of anesthesiology, ophthalmology, otolaryngology, plastic surgery, orthopedic surgery, dermatology, internal medicine, and pathology.

care. Our patients no longer come to us from the emergency room carrying a huge manila envelope containing film of their facial trauma, nor does the x-ray department pull that same envelope from their files for us to review its contents on a wall of fluorescent light boxes. Instead, I am handed a compact disc to download those images of MRIs or CAT scans into a personal computer in order to review and read the radiologists' findings and diagnoses.

As I stated in the opening sentence of this article, I started my practice in a less complicated time. Three years in the United States Air Force Dental Corps and the G.I. Bill allowed me to complete my graduate and postgraduate training free of debt. I have been fortunate in practicing my chosen specialty during perhaps its acme. A significant portion of it has been a private fee-for-service practice; indemnity insurance or cash reimbursement for my professional services; a large oral surgeon-to-patient population ratio; well-defined boundaries around dental and medical specialties; and a scope of practice that expanded logically with my dental knowledge base. New fields, such as orthognathic surgery, TMJ surgery, and implantology, blended seamlessly with dentoalveolar surgery, facial trauma, and pathology.

### The Next Thirty Years

My partners and their future partners may or may not be so fortunate. There have been extensive and wide-reaching changes within the specialty over the past decade and a half. Over forty percent of our training institutions have either mandatory or optional dual-degree programs. The scope of our specialty's services continues to expand predominately into facial cosmetic surgery. The

specialty rivalries within dentistry, and especially amongst our medicine based colleagues, are escalating. Observe the ongoing debate within dentistry on who is best qualified to place dental implants. (Is it the oral maxillofacial surgeon, the periodontist, or the general dentist? Perhaps is it logical to expand the prosthodontist's training into this surgical realm?) Witness the controversy recently reported in the *Los Angeles Times*, *The New York Times*, and on the *Fox News Channel* with the announcement of the California legislatures decision (California Senate Bill 1336) to permit trained dentists (actually oral and maxillofacial surgeons who meet specific credentialing criteria) to perform facial cosmetic procedures in their offices.

While the chiefs of many of our residency programs would contend that this expansion of our training into facial plastic and cosmetic surgery is a logical progression, other educators would counter that it is in reality a lack of busyness issue. Oral and maxillofacial surgeons are at a greater risk of failing to make an income performing the traditional procedures that I have performed over the past thirty years. Health insurance conglomerates increasingly deny coverage for orthognathic and TMJ surgery. Several have even begun to deny coverage for the removal of asymptomatic third molars, and to seek written justifications to remove them even when symptomatic if the patient is under fifteen years of age or over fifty. Health maintenance organizations and other managed healthcare counterparts reimburse at fees that sometimes barely cover overhead expenses. The reimbursement for traditional services at customary fees is no longer a given in tomorrow's practice.

Our residents finish their training with significant deferred debts incurred in dental school and residency training. If they intend to open a private practice,



there is additional borrowing as a consequence, and if they have chosen a dual degree track they are leaving school with more debt than ever witnessed before. The need to service this indebtedness is problematic. The dilemma this is creating for all dental graduates and certainly for our oral and maxillofacial residents entering into private practice, is maintaining one's professional integrity and ethics while managing these liabilities. That can easily impact upon rational decision making and treatment planning. There are more of us competing for fewer patients who have the discretionary dollars to pay for our services. The cost of those services continues to escalate. For example, a simple tooth extraction in my office in 1973 was \$15.00. Today, the bill is \$99.00 for the same extraction.

With decreasing reimbursements from third party payers, the likelihood of an increasing focus on managed health care, and increasing numbers of practitioners competing for the health-care dollar, we face a challenging future. I believe it is a future in which state and federal governments, medical and dental insurers, and trial lawyers are quickly becoming equal partners with us in making healthcare decisions for our patients.

Having said that, I believe the private practice of oral and maxillofacial surgery remains bright. An office-based practice where the majority of the procedures we perform can be accomplished using conscious and deep sedation or general anesthesia allows us to control costs and still provide great access to care for our patients. Other dental and surgical specialties are covetous of this autonomy.

If we are to maintain this independence and resultant financial success, the members of the specialty and especially its leaders must be encouraged to become futurists. Our specialty must devote significant time and its best

efforts to plan for the future and readily adapt to it, rather than react to it. We must become active participants in the research and development of new biological solutions for the clinical problems we treat. The research being presented in our scientific journals today are valid predictors of what our specialty is to become over the next thirty years.

Biologicals that promote bone, cartilage, and nerve growth will allow us to resolve conditions and diseases currently being treated surgically. Engineering of odontogenic tissues will bring a new paradigm to restoring and replacing teeth. Biological induction techniques and tissue engineering will replace today's surgical interventions for facial trauma, tumor ablation, and the correction of skeletal growth and developmental deformities. Biological and pharmaceutical sciences could eliminate the surgical management of periodontal disease entirely.

Dentistry must assume a vital role in this research. Our specialty, through the auspice of the Oral and Maxillofacial Surgery Foundation, must lead in funding the research, development, teaching, and use of these new biological therapies. Anticipating what abilities our residents must possess at graduation will allow the specialty of oral and maxillofacial surgery to remain the viable, healthy one that it is today. It is a specialty, I believe, that will continue being the most interesting and unique in all of health care. ■

I believe that mastering the octopus called practice management was essential to success, and it has [given us] the ability to ethically practice the full scope of oral and maxillofacial surgery...in a manner that is personally satisfying and financially rewarding.

## On Becoming a Surgeon

Greg Sarka, DDS

### Abstract

A dentist who has just completed eight years of oral and maxillofacial residency training reflects on what drew him to the specialty and how it changed him. He notes three characteristics of his training that differed from predoctoral education and help define a surgeon: patient-based learning, learning from constant discussions with colleagues, and the habit of facing unexpected outcomes as a source of learning.

Oral and maxillofacial surgery is a challenging and rewarding way of life. There is great potential for personal and professional growth, but the path to becoming a surgeon is long and arduous. I would suggest that it is not for the weak or faint of heart. I recently completed the dual degree program at the University of Pittsburgh, and I am joining three other oral surgeons in private practice in Portland, Maine. I have been asked to share my thoughts on choosing a career in oral and maxillofacial surgery, the training of oral and maxillofacial surgeons, and selecting a practice in oral and maxillofacial surgery. I am not an expert in this field, but I have survived the rigors of training. This is my story.

As a dental student I was immediately drawn to oral surgery's definitive nature of treating dental disease. What could be a more definitive treatment for caries or periodontal disease than an extraction? It seemed neat, simple, and clean. I was intrigued by the surgical philosophy of eliminating disease rather than managing disease, and I had to see more. I enrolled in several externships and started planning to attend a surgical residency. What I learned is that oral and maxillofacial surgery training is anything but neat, simple, and clean. I thought that the residents I met on my externships were miserable. Their training lasted four to seven years after dental school. They spent their days and many nights at the hospital taking care of patients who were often indifferent to

the sacrifices people were making to provide them with the care they needed. Their attendings were demanding, few words were wasted on pleasantries, and emphasis was placed on performance. They say you can't be a Spartan and live in Athens, and this was definitely not Athens.

To my surprise, the residents persisted and wounds healed, fractures mended, disease was eliminated. Not only did the residents survive this demanding program of training, they excelled. I did not understand the process entirely, but I felt I could succeed in this environment. I wanted to test myself, to be pushed past the limits of fatigue, stress, and pressure and still be required to think and perform. I searched for the best surgical training in a large busy program. I also looked for a program in a city that would give my family a fighting chance to survive my training as well. My search led me to the University of Pittsburgh. We matched and I packed up my family and moved east from San Francisco following my completion of the DDS program at the University of the Pacific.



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Residency training was a wonderful experience for me. The days, however, were long and demanding, and many days would be better forgotten than remembered. As a resident, I began to understand what made oral surgery training so different than other training I had experienced. Three things stood out specifically.

First, there was no course syllabus. Sure, we had didactic lectures and conferences, but no one told you what to study or where to find the answers. This was in stark contrast to dental school or medical school, where you were given a syllabus and told that everything on the test this Friday is in chapter 23! Mostly, we operated and saw patients in clinic. Our education was guided by the disease process or injury that walked into the office at any given moment. At first, the attendings would ask us direct questions or actually do a little teaching about what we were seeing, but the burden of learning was on us. At the end of the day, we would go back and read about the topics we had seen and discussed that day. As time passed, there was even less direction and greater expectations for the residents to be responsible for their own learning. We started checking the schedule in advance in order to prepare for the cases we would see. Imagine picking a topic, reading about it in general, reviewing what you had read, and then asking yourself, what is important here. Perhaps you formulated some questions and then sought answers to those questions. Sometimes you might outline a treatment algorithm or list results of outcome studies. Oftentimes, your own inquiry would force you deeper into the literature to find answers to specific questions. Imagine all this self-directed learning before anyone had told you what the topic was or what the questions were. We were ultimately motivated, however, by the exam which would be lying on the OR

table at 7:15 AM or walking into the office at 9 AM or showing up in the ER at midnight.

We might actually form a hypothesis and then search the literature on that topic only to find that there were several possible answers to our question. This leads to the second difference I noticed in oral surgery training. We would often have lengthy impromptu discussions or even informal debates amongst ourselves and our attendings. We would discuss the results of our self-directed study on a particular topic. Then, our attendings would add evidence based on their own specific surgical or clinical experience. In short, we would consult each other, our attendings, and even other medical specialties. This would occur at weekly conferences, such as a case conference or a mortality and morbidity conference. The residents and attendings openly shared their successes and their failures. There was heated debate, strong criticism, and even a little chastising. The great thing about oral surgeons, however, is that after ten to twelve years of training after college, there are no weak personalities. No one lets a dogmatic, confident presentation go unchallenged, and the challenged individual welcomes criticism and debate!

And finally, the third difference I noticed was that no punches were pulled, no holds were barred, and no one cried uncle! There was no political soft stepping. The surgeons in my program bluntly evaluated the residents and each other. If someone had a bad outcome, that case was presented at conference, not swept under the carpet. There was never any question that the case would be critically reviewed. Occasionally, a surgeon would acknowledge a mistake or misdiagnosis and ask for others' experiences in a certain area. Perhaps a surgeon would defend his procedure

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If someone had a bad outcome, that case was presented at conference, not swept under the carpet... Unlike many educational environments, oral and maxillofacial surgery training is reality-based.

despite the outcome. On occasion, someone would be severely criticized for doing something really stupid! (It always seemed as though I was usually the one being criticized.) In any case, personal feelings were left at the door.

As I approached my year as chief resident, I started looking at joining a group practice. I used the same criteria as I did for choosing a residency. I put my family first and looked for a location in which they would prosper. I also looked for a large group practice with accomplished surgeons who practiced a full scope of oral and maxillofacial surgery. I really valued the opportunity to continue growing and sharing knowledge with accomplished partners. After ten years of school and training, I look forward to applying what I have learned. Finally, I felt strongly about treating the people in my community. I know I have been fortunate to receive the training and benefits that I have received, and I looked forward to passing that gift to the people where my family lives. Perhaps by taking my share of trauma calls, practicing in an environment that accepts Medicare, and being involved in my professional organizations and in my community will make a difference in someone's life beyond my own.

I benefited greatly from my oral surgery training. I had the discipline and motivation to learn on my own. (Mostly, I was too scared to be caught unprepared!) More importantly, I attended an awesome training program. At the University of Pittsburgh, we had eight full-time attendings and at least five very involved part-time attendings. Everyone attended conferences, and this routine provided a wealth of information, knowledge, and

experience that was constantly shared and reviewed. Finally, I had a plethora of patients and cases from which to learn. We were so busy! The Socratic method of teaching flourishes in an open environment with a variety of experiences and input; and at the University of Pittsburgh, it definitely flourished!

Unlike many educational environments, oral and maxillofacial surgery training is reality-based. In life, no one tells you the answers or even the questions. There is no syllabus or outline. It requires open communication and confidence, as well as humility. Life, like surgery training, is a journey full of good and bad experiences. What we learn from them and what we do with that knowledge is our own individual responsibility. It is enlightening and empowering, but it is also difficult and at times a burden. I would suggest that you throw your heart into it. Do not save yourself. Treat others with dignity, compassion, respect, and integrity. Finally, continue as we have been trained searching for the less obvious answers to difficult questions. We will all be the better for it! ■



# Improving Communication Through Publications: Contributions of American Oral and Maxillofacial Surgery

Daniel M. Laskin, DDS, MS, DSc (hon),  
FACD

## Abstract

The *Journal of Oral Surgery* was the first specialty publication in the United States and since 1943 it, its successor, the *Journal of Oral and Maxillofacial Surgery*, and other publications of the American Association of Oral and Maxillofacial Surgeons have been committed to communication within the specialty, among dental specialties, and with dentists in general practice. A review of back issues of the journal is a history of the development of the specialty. AAOMS publications are intended to share emerging scientific and clinical knowledge, inform and educate all dentists, and establish standards for quality patient care.

The publications of a dental specialty organization serve many purposes. Their content clearly documents the scope of the specialty as well as reflects the changes, contributions, and advances that have been made over the years. Thus, in a sense, these publications serve as a chronicle of the history of that specialty. But, more importantly, they serve as a means of communicating new information to the members of the specialty, the dental profession, other health groups, and the public at large. In this regard, oral and maxillofacial surgery and the American Association of Oral and Maxillofacial Surgeons (AAOMS) have been outstanding pioneers and leaders in a number of areas. Among their important publications are the *Journal of Oral and Maxillofacial Surgery*, the *Office Anesthesia Evaluation Manual and Model Office Anesthesia Regulations*, the *Parameters of Care*, the *OMS Knowledge Update*, and the *AAOMS Surgical Updates*.

## Evolution of the Journal of Oral and Maxillofacial Surgery

A review of the evolution of dental journalism reveals that the various publications prior to the late 1920s were almost entirely proprietary, with ownership vested mainly in commercial houses, private dental schools, and publishing companies, and with control of content under their jurisdiction. In 1916, William J. Gies referred to trade journalism in a profession as a form of

vulgar autocracy (Goodsell, 1959). Henry L. Banzhaf, in his 1928 presidential address to the American College of Dentists, (Goodsell, 1959), called for “measures which may be effective in terminating the non-professional publication of dental literature.”

In 1935, the American Society of Oral Surgeons and Exodontists (now AAOMS) formed a committee to investigate the possibility of publishing an oral surgery journal, which, after several years, led to negotiations with the American Dental Association and, in 1942, to an agreement with the ADA to publish the *Journal of Oral Surgery*. Thus, with the initial issue in January 1943, oral surgery became the first dental specialty to have a journal devoted entirely to its field. Its sponsorship by the ADA clearly established that oral surgery was a dental specialty and further cemented the specialty's close bond with that organization.

This journal (now the *Journal of Oral and Maxillofacial Surgery*) has served a unique role over the more than sixty years of its existence. During this



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time, it has remained true to the philosophy expressed by Leslie M. FitzGerald, then president of the American Society of Oral Surgeons and Exodontists, in the foreword to the first issue. "Although its name implies that the journal will be devoted to the subject of oral surgery, it will by no means be exclusively an oral surgeon's journal. Articles of benefit to the general practitioner of dentistry as well as to those who limit their practice to oral surgery will be published." If one merely adds "other dental specialties and allied health professions" to his list of benefactors, this statement is as correct today as it was in 1943. For example, in the first volume of the journal there were articles of general interest on "Anatomic considerations in local anesthesia," "Nerve injuries incident to dental surgery," and "Importance of oral surgery to prosthodontia". In recent issues, this trend has continued with reports on "Postoperative prophylactic antibiotic treatment in third molar surgery—a necessity?," "Osteonecrosis of the jaws associated with the use of biphosphonates," and "Influence of aging on tooth eruption." Because the journal appeals to a broad audience, one finds that currently over 15% of the individual subscribers are not members of the AAOMS.

Over the years, the *Journal of Oral and Maxillofacial Surgery* has not only served our profession well, but it has also established a reputation as the premier oral and maxillofacial surgery publication in the world. As a result, more and more authors from other countries have sought to have their contributions published in this journal. Currently, more than 70% of the articles published in the journal are by foreign

authors. This has served two important functions. First, it has enabled the journal to extend its influence internationally. But more importantly, it has resulted in a free exchange of new ideas and information so that oral and maxillofacial surgeons in this country, as well as those in other countries, can benefit from what is new and exciting in the field.

A review of the contents of the journal over the years also reveals some other significant trends. With the establishment of formal educational requirements for training in oral and maxillofacial surgery, and the inclusion in these requirements that some time be devoted to scholarly as well as clinical activities, many of the articles now have residents among the contributing authors. This experience not only has made them more critical practitioners, but also has stimulated many to continue submitting articles for publication when they enter practice. The large number of submissions received by the journal and the limited number of available pages have enabled the criteria for acceptance of articles to be continuously upgraded and this has resulted in steady improvement in their quality.

There have also been changes in the types of articles published in the journal over time. With the realization that sound clinical practice requires a solid scientific basis and the attendant increase in research activity, more and more scientific articles have been published. At the same time, there has been a corresponding increase in the number of clinical articles based on reliable data rather than merely on anecdotal evidence. There have also been major changes in the areas of focus of the specialty as noted in the journal. Thus, whereas in the journal's earlier years the articles dealt mainly with the management of trauma, infections, and cysts and tumors, in more recent years there has been greater emphasis on orthognathic

surgery, reconstructive surgery, and temporomandibular joint surgery. Currently, there are increasing numbers of reports on distraction osteogenesis, implantology, endoscopic procedures, and esthetic surgery. All of this is a reflection of the unique ability of the specialty to continually adapt as new basic information is generated, new technology is developed, and new procedures evolve.

Many of the major advances in the field of oral and maxillofacial surgery have been introduced on the pages of the journal. Although most of the early work on advanced techniques in orthognathic surgery was done in Europe, many improvements in these techniques were developed by American oral and maxillofacial surgeons and reported in the journal. Moreover, it was the pioneering work of Bell that provided an explanation for the ability of the facial bones to withstand the changes in blood supply associated with such surgery and thus further expanded this field (Bell, 1969, 1975, 1977). Other important contributions, to name but a few, have included the work of Thoma on the treatment of condylar process fractures (Thoma, 1945), Moose on an intraoral approach to correcting mandibular prognathism (Moose, 1945), Olson and Stallcup on the use of sodium pentothal for outpatient anesthesia (Olson, 1943; Stallcup, 1946), Hall on the use of the air turbine unit for removal of impacted teeth (Hall, 1959), Marx on the treatment of osteoradionecrosis (Marx, 1983a, 1983b), and Ellis on the management of mandibular angle fractures (Ellis, 1993; Potter & Ellis, 1999). Clearly, the journal represents one of the most effective means of communicating new information to the specialty and others that can profoundly affect patient care.

## Anesthesia-Related Publications

In addition to the journal, there have also been several other program-associated publications produced by the American Association of Oral and Maxillofacial Surgeons that have represented pioneering efforts in dentistry. In order to assure the safety of patients undergoing general anesthesia and deep sedation in the office, a self-regulatory office anesthesia evaluation manual and program were developed in 1967 by the Southern California Society of Oral Surgeons. This became a national program in 1971 under the sponsorship of AAOMS. Concomitant with the development of this activity, there was also an interest in creating a program to train assistants who participate as a member of the anesthesia team. The result was the creation of a six-month home study course, followed by an examination that focused on the related biomedical sciences, the medical history, the drugs used, the administration and monitoring of the anesthesia, and the management of medical emergencies. A prerequisite for participation is certification in basic cardiac life support (BCLS). This program, named the "Oral and Maxillofacial Surgery Anesthesia Assistants Program (OMAAP)," premiered in 1988 and has continued since that time. These efforts, along with the AAOMS's role in promoting state office anesthesia regulations, have made the administration of general anesthesia and deep sedation in the oral and maxillofacial surgeon's office an extremely safe and efficient procedure. First developed by the AAOMS in 1975, the model anesthesia regulations for dentistry have now been adopted by fifty states as a result of the combined efforts of AAOMS and the dental community.

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## Parameters of Care

With increased emphasis on the quality of care provided in the health professions, high priority has been given to the development of parameters of care in medicine and dentistry in order to assure the appropriateness and successful outcome of the various treatments used. Oral and maxillofacial surgery was the first specialty in dentistry to develop such treatment guidelines, criteria, and standards. In 1992, the AAOMS published the *AAOMS Parameters of Care-92*, which was based on the best available knowledge about the current diagnosis and treatment of the various diseases, injuries, and defects of the mouth, face and jaws. In 1995, *The AAOMS Parameters of Care-95* was published (American Association of Oral and Maxillofacial Surgeons, 1995), and in 2001 it was again updated under the title *Parameters and Pathways: Clinical Practice Guidelines for Oral and Maxillofacial Surgery* (American Association of Oral and Maxillofacial Surgeons, 2001). This document undergoes constant review and is revised and updated as new scientific and clinical information becomes available so that it

remains reflective of the current state of clinical practice. As a testimony to the quality and utility of this document, it has been endorsed by the International Association of Oral and Maxillofacial Surgeons as well as by thirty-five national oral and maxillofacial surgery organizations throughout the world. It has also served as a model for clinical guidelines developed by other specialties of dentistry.

## OMS Knowledge Update

In addition to providing continuing education through its journal, its annual meeting, and its implant conferences, AAOMS has published a home-study program known as the *OMS Knowledge Update*, which is also available to others who have an interest in this area besides oral and maxillofacial surgeons. It reflects the association's major commitment to the continued education of its members for the ultimate benefit of the public. Contained within these volumes are discussions on topics such as patient evaluation, anesthesia; implantology; preprosthetic surgery; orthognathic surgery; reconstructive, cleft, and cranio-facial surgery; trauma; and management of temporomandibular disorders written by experts in the field. Periodically, new material is added and old material is updated so that the information remains current.

## AAOMS Surgical Update

In order to share information with other dental practitioners, the American Association of Oral and Maxillofacial Surgeons created the AAOMS Surgical Update, which has been distributed periodically to all dentists since 1985. Among the subjects covered over the years have been ridge augmentation, dentofacial deformities, wisdom teeth, pain control, dentoalveolar and maxillo-

These efforts, along with the AAOMS's role in promoting state office anesthesia regulations, have made the administration of general anesthesia and deep sedation in the oral and maxillofacial surgeon's office an extremely safe and efficient procedure.

facial trauma, TMJ disorders, oral cancer, antibiotic therapy, odontogenic cysts and tumors, diagnostic imaging, office anesthesia, radiation therapy, and dental implantology. In addition to receiving clinically applicable information, the readers can also obtain two hours of continuing education credit from each issue by answering a brief quiz.

## Conclusions

Margaret Fuller once said, "If you have knowledge, let others light their candles at it." Throughout the years, oral and maxillofacial surgery and the AAOMS has continued to subscribe to this philosophy by not only developing publications that are designed to provide current information for the specialty, but also to making information available to others with an interest in the field. Through such sharing of knowledge everyone benefits, because it leads to closer cooperation between specialties, as well as between professions, ultimately resulting in better patient care. ■

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# The Morbidity and Mortality Conference: A Case Assessment Tool, Quality Control Measure, and Teaching Method

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A. Thomas Indresano, DMD

## Abstract

The morbidity and mortality conference and other traditions in hospital-based training inculcate the habits of understanding evidence and its clinical application and being able to articulate these to one's peers and to learn from unanticipated outcomes. By contrast, predoctoral dental training and the environment of general dental practice do not encourage collegial reflection on the outcomes of practice. Benefits and cautions in applying the habits learned through M&M conferences are discussed for both the oral and maxillofacial and the general practice settings.

The fact that oral and maxillofacial surgery training occurs in the hospital sets it apart from general dental practice in many ways. The presentation and review of cases and the learning that occurs from this process is one of the most striking consequences of this fact. This difference comes from accepting and employing the medical teaching model in oral and maxillofacial surgical education that has been in place in medicine since before Sir William Osler.

The American prototype of hospital-based training is a combination of the scientific method and the Socratic method. Education is provided in a small group setting, using the presentation of patients or cases as the centerpiece of the training and discussion and debate as the tools. Several opportunities for this presentation process occur daily for the oral and maxillofacial surgery resident, first on patient rounds at the bedside and then in different conference or seminar periods. Residents become adept at the process early, and eventually they solidify the technique into their primary thought processes for use throughout their practice life. Challenges occur from their teachers, both higher level trainees and attending professionals. The foundation is internal and external questioning of fact and ultimately of one's self. Defense and justification is based on scientific evidence, proven and published, but the ability to argue one's case is also relevant. Careers are built on the ability to survive, nay excel, in this arena. The heroes become the quick and the studied, not necessarily the titled.

Unlike the European and Asian traditions of venerating the professor because of his position on the faculty, the young and the able-witted can become the stars and because of their prowess may even become the professor some day. Reputation in this arena, like that of ancient Rome, definitely enhances the standing of the intellectual gladiator.

## Learning to Think Like a Surgeon

The basis of modern oral and maxillofacial surgery training is one of evidence-based decisions. Knowledge of the current applicable literature is essential, but evaluation of that literature is even more important. An article has merit only if it has been reviewed and follows the accepted rules of merit. The random, double blind, prospective study with appropriate inclusion and exclusion criteria takes the top spot. Case review exercises foster achieving quality patient care by changing treatment decisions based on the analysis of results from previous treatment, compared with the literature proven standards.

The epitome of this critical assessment process is the morbidity and mortality conference, a weekly case review confer-

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ence designed originally to review deaths, but modified to include various complications arising in treatment (Pierluissi et al, 2003). The process requires a standardized presentation of all cases and all complications that occurred in cases performed over a time period, often the previous week. Hospital codification of this process has occurred over the years and is currently required by many regulatory agencies like the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Oral and maxillofacial surgery residents are exposed to this training from the first day of their residency program. They are taught to evaluate patients in a systematic fashion, exactly as their physician colleagues are, and to manage these patients by an accepted method that includes establishment of a diagnosis, treatment planning, execution of treatment, and evaluation of results. They then communicate their findings to each other by patient presentation on rounds, again to their faculty at teaching rounds, later to their colleagues at department meetings, and ultimately to the whole hospital staff at the morbidity and mortality conference.

The method is used throughout their education, beginning when they are taught medicine, surgery, and anesthesiology in their early rotations on the "medical services." All oral and maxillofacial surgery residents receive a minimum of twelve months of medicine, surgery, and anesthesiology. Most receive another six months of plastic surgery, otorhinolaryngology, emergency medicine, and other medical specialties. Many also fulfill the requirements for a medical degree and receive, among

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other disciplines, pediatrics, obstetrics, and psychiatry training.

The ability and the need to discuss one's treatment plan, goals, and outcomes becomes second nature. It is not only looked at as desirable, but essential. The process helps mold a self-assessing and self-assured practitioner, one who not only reviews care and evaluates it against a norm, but also submits it to others for scrutiny. The process develops confidence, introspection, and modification, plus a depth of knowledge and sometimes a bit of cockiness from having to defend decisions based on possessed knowledge. Those who excel are quickly picked out and receive adulation and even adoration. This often transfers to the ability to speak on a local and national scale, and those reputations are built as well, contributing to the ego.

How does the M&M conference protocol achieve its results? Gordon (1994), in an evaluation of the philosophy behind the morbidity and mortality conference, calls it "the golden hour of surgical education" where "the short can outwit the tall...the resident can outwit the attending." The objectives of the conference are to learn from complications and errors, modify behavior and judgment based on previous experience, and prevent the repetition of errors leading to complications. Thompson et al (1992), called the morbidity and mortality conference "an important component of the overall quality assurance program," noting that adverse events are reported that are missed by other reporting

processes. Harbison and Regerh (1999) stated that the conference is a potent tool for teaching, but also mentioned that residents often do not view the conference favorably because of the pressure of being under the spotlight.

Both surgical and medical disciplines favor this method of teaching and quality improvement, but recognize that the process, if not used properly, can be ineffective as a quality assurance device. Therefore, there is much written in the medical literature about ways of improving the morbidity and mortality conference. Drawbacks cited happen if the conference is transformed into more of a lecture experience, losing the effective interaction that comes from the Socratic method, not effectively reviewing cases, or making the results of the conference so punitive that the residents become "gun-shy" when the meeting becomes a method of humiliation rather than learning. If the meeting is conducted in a non-threatening manner, the collegial atmosphere of the conference and the understanding that the exercise helps both patient and doctor can make the exercise extremely worthwhile for all.

### Is It Applicable in General Practice?

Contrast this to the practitioner who graduates from a dental school, takes and passes a single state or regional board examination, and practices in solo practice for the next thirty years. There is something missing in professional education when one has not learned the habit of reflecting on one's practice with the help of one's peers.

Increasingly, predoctoral dental education provides training in patient presentation, and in evidence-based dentistry, but the amount can vary. I contend that the process is never fully

ingrained into the general dentist's routine. There is no heritage of presentation to colleagues, peers, or teachers; and after graduation, there are few occasions to use the tool. If anyone ever sees your cases it is at the "study club" or at the local dental society branch meeting. Case defense and justification are not the prime motivating factors for such presentations. Introspection and learning from errors may never be realized based on traditional dental education. What sharing that does occur may be motivation to attract referrals or to discuss the technique of a new procedure, but not for introspection and quality assessment, and not for review by an independent evaluator.

General dentists must demonstrate conformance with standards; but except for the one-time initial licensure requirements, these are all procedural rather than outcomes-based measures. There are regulatory bodies, but most dental practitioners do not submit their office to a regulatory board, such as the JCAHO, for accreditation. The regulations that need to be complied with are related to continuing education credits received to maintain one's license and not to improve one's thinking process. Even the rare oral and maxillofacial surgeon who fails to continue holding a hospital appointment benefits from the mental training he or she has received over years of presentations, seminars, and conferences focused on review of patient care. The practice of questioning one's results and justifying behavior when it comes to patient care remains fixed in the practice patterns and stays as an invaluable tool among surgeons. Many crave this lost science and become affiliated with a training program just to partake in these seminars and conferences.

How can these methods be incorporated into a general dental practice? One method of adoption could be to foster such conferences at the level of the local dental society. Practitioners would be encouraged to report cases on a regular basis for discussion and learning. I am skeptical that this would flourish, since compelling motivation would be lacking. Practitioner motivation might come in the form of discounts in malpractice insurance premiums for those who participate, but there would have to be evidence that the process improved patient care for general dentists and therefore reduced the incidence of law suits so that the insurance carriers would benefit from encouraging such behavior. Another way could be to incorporate these methods into Advanced Education in General Dentistry or General Practice Residency programs. This would provide an avenue for general dental practitioners to get involved with these training programs and be able to participate in the process.

The other important question is should this teaching method be encouraged for the general practitioner? That is another question entirely. One can make the case for better patient care, learning from one's own practice, and making sure that errors are not repeated. However, in a modern general dental practice, where the major aspect is restoration of teeth, practice management dictates that patient choice is an integral part of the acceptance of a treatment plan. There may be different levels of care based on cost. Multiple treatment plans are possible, and there may be few negative effects from choosing one over the other, so that the benefits of a more disciplined approach may not be as evident in the general practice of general dentistry as in an oral and maxillofacial surgery situation. ■

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## In Whose Interest?

Polly S. Nichols, DDS, MA  
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Dr. Smith has been approached by ExceLase, a company that wants him to participate in the final stages of premarketing development for one of its new products. Dr. Smith is told that he will be given a laser unit to use for two months. If in those two months he performs at least two hundred procedures with the laser and keeps detailed records about those procedures, he will be allowed to keep the unit—a \$28,000 “gift.” Dr. Smith is excited about the possibility of having a laser to use, and potentially to own, without the usual expense. However, he wonders about the number of procedures required, will he be doing what his patients really need? Or will he be motivated by the number of procedures required? Dr. Smith recognizes the potential for a conflict of interest in the arrangement. In essence, ExceLase will be paying him the equivalent of \$140 per procedure if he does two hundred procedures in two months. Should he accept such an offer? If he does, should he be required to disclose the arrangement he has with ExceLase to his patients?

A research and development project like the one proposed by ExceLase raises a number of ethical concerns. Among the many factors that Dr. Smith needs to consider are the potential benefits and harms to his patients, their properly informed consent, the possibility of compensation if any patients are injured, and the effects on patients’ and society’s trust given either the reality or even the appearance of a conflict of interest. This

collection of ethical concerns plays out in at least two highly practical questions: Will the arrangements offered by ExceLase create an unethical conflict of interest for Dr. Smith? And will such arrangements be likely to lead to biased results either in the collection of data or the subsequent presentation of the results to others in oral health care?

Some ethical problems can be avoided easily simply by telling the truth. For example, the investigator cannot make up data, purposely distort observations, or otherwise manipulate the results (Rule & Veatch, 1993). And, of course, patients should be told the truth and given a chance to accept or refuse the use of experimental technologies. These obvious conclusions aside, there remain significant questions regarding conflict of interest and the potential for bias in ExceLase’s offer. There is growing recognition in our society that the increased practice of industry’s funding of healthcare research may endanger

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the traditional fidelity of professionals to their patients and may bias the design, analysis, and presentation of research results.

The entrance of these issues into the dental literature has been influenced to some extent by the medical world's current intense debates over industry-funded studies, societal oversight, and conflicts of interest in medical research. Our two professions, medicine and dentistry, often cross-pollinate in this way because we are rooted in the same science and social turf. In medicine, the proliferating relations between research, clinical applications, and industry's need for profits seem to be the crux of the matter. As a result of the increasing complexity of the relationship among these three components, proper disclosure of potential conflicts of interest has become critical.

In the words of two astute commentators on health care ethics, "Having clinician-investigators with an economic interest in products they are evaluating for safety and efficacy threatens both honesty and fidelity. Yet this arrangement is largely unchecked and growing" (Beauchamp & Childress, 2001).

Conflicts of interest emerge in dentistry wherever dentists have financial incentives that may interfere with their loyal promotion and protection of their patients' oral health or the fully truthful presentation of research results. The standard way to protect against the potentially negative effects of conflicts is to require that they be disclosed. For example, disclosure of conflicts of interest is a regular policy of journals and of organizations sponsoring continuing education. This strategy of disclosure also has been incorporated in professional codes.

The *ADA Principles of Ethics and Code of Professional Conduct* states that "a dentist who presents educational or scientific information in an article,

seminar, or other program shall disclose to the readers or participants any monetary or other special interests the dentist may have with a company whose products are promoted or endorsed in the presentation. Disclosure shall be made in any promotional material and in the presentation itself."

Rules of this sort indicate a recognition of the problems of bias and conflict of interest in the profession's codes.

But the observations of Beauchamp and Childress regarding medicine's attention to such matters also might be said of dentistry: "On the whole, the medical profession has attempted to address specific conflicts of interest in financial arrangements, such as fee splitting, without attending to general and systemic issues of conflicts of interest (Beauchamp & Childress, 2001).

As the tightly spun web of research, industry, and profession has become more complex and pervasive, questions about the adequacy of simple disclosure have increased. What level of financial involvement or other incentives needs disclosure? In the realm of clinical research, how much disclosure of conflict of interest would the researcher provide to prospective subjects who also are his or her patients. More importantly, is simple disclosure adequate to prevent these potential conflicts from interfering with a dentist's primary goal of faithful patient care or with the secondary goals of objective research and unbiased publications or other presentations? In short, would some conflicts of interest be prohibited either because they too likely interfere with the fundamental goals of patient care or because their appearance will undermine trust in the profession?

There is growing recognition in our society that the increased practice of industry's funding of healthcare research may endanger the traditional fidelity of professionals to their patients and may bias the design, analysis, and presentation of research results.

Dr. Jeffcoat offers the reassuring argument that there is a seven-tiered defense against scientific misconduct inherent in the process of scientific publication: personal integrity, right to publish, regulations, the FDA, peer review, intelligent readers, and the scientific method (Jeffcoat, 2002).

Dentistry's concern for such matters also is evident in the profession's literature. For example, conflicts of interest and "the extent to which they taint the integrity of scientific work" was the focus of a recent editorial by ADA editor Dr. Marjorie Jeffcoat (Jeffcoat, 2002). She stated that concerns and questions about conflict of interest find their way to her office regularly. Furthermore, concerns about research ethics are included among the "Ethical issues facing oral healthcare organizations" that resulted from the participation of sixty-two oral healthcare organizations in Ethics Summit II (Peltier et al, 2000).

This should not be surprising, given the numerous ways that "bias" and "conflict of interest" have the potential to affect nearly every dentist's experience. Dentists often look to industry research and marketing to introduce new products and techniques. It is "the industry" that often sponsors, either directly or indirectly, numerous continuing education opportunities. These services are valued by most dentists. However, friendly suspicion also is harbored because the participants know that industry needs to sell things to stay in business.

Such suspicion was articulated recently by Dr. Norman Feigenbaum in an article in which he called for "the ADA and other responsible organizations throughout the world to form committees to help create useful regulations governing what factors need to be disclosed during different venues.... It is time to attack these issues with the verve that they demand" (Feigenbaum, 2002).

As a result of these suspicions, the *Consumer Reports* of dentistry are

regular reading material, and dentists attempt to read every piece of research that comes across the desk and to attend seminars and research presentations. Dental professionals want to know the scientific facts about dental materials, pharmacology, technology, pathophysiology, and more. This vital information directly affects the treatment provided for patients.

In response to some of these needs, in February 2002, the Journal of the American Dental Association established the JADA Industry Advisory Board. The board's primary function is to "recruit industry-sponsored or funded research papers and summaries on new or improved dental products to provide practicing dentists with knowledge of what new products are available and what research was conducted in their development" (American Dental Association, 2002).

This brings the original questions about ExceLase's offer to Dr. Smith into focus once more: does industry funding in any of its myriad forms (product donation to independent researchers, financial sponsorship of "independent research," research done in their own lab oratories) threaten fidelity to patient care and guarantee presentation of biased research results?

Regarding the publication or other presentation of research, there are a number of safeguards. For example, Dr. Jeffcoat offers the reassuring argument that there is a seven-tiered defense against scientific misconduct inherent in the process of scientific publication: personal integrity, right to publish, regulations, the FDA, peer review, intelligent readers, and the scientific method (Jeffcoat, 2002). Presumably, adhering to the scientific method is the practical equivalent of a code of ethics and the other six factors balance each other in

such a way as to provide the best possible outcome. In the current environment of corporate misconduct, however, it becomes uncomfortably clear that not even the presence of a code of ethics guarantees complete veracity of the absence of bias.

Only the individual researcher may know to what extent a presentation is unbiased or to what extent the pressures brought about by the company supporting the research may tend to skew or influence the data presented. Sometimes the researcher may not even be aware of bias. These realities are difficult to escape and perhaps are best corrected or avoided by disclosure. It is typical that, in keeping with the code of ethics, research presentations begin with a statement about who supported the research and what the level of sponsorship was. Published research more often has such statements at the end of articles. Once disclosure is made, the audience/reader realizes that there is potential for bias and can interpret the presentation in light of the disclosed relationship.

Is there any way to devise a “fool-proof” method of carrying out research that would eliminate the potential for bias completely? Probably not. Even if money was no object and bureaucracy could be effortlessly endless, the researchers still would be human. But should this reality inhibit efforts to certify reliable research and publication? Of course not. In pursuit of this goal—reliable research and publication—it may be wise to act on Dr. Feigenbaum’s call for “a ‘living’ document, constantly revised to monitor newly invented schemes developed to circumvent established guidelines” (Feigenbaum, 2002).

Such safeguards may be sufficient to ensure reasonably reliable dissemination of research results. But what of the protection of fidelity to the patients’ best interests? Specifically, what can Dr. Smith do to safeguard his fiduciary relationship

to his patients if he accepts the offer from ExceLase? Is it enough for him simply to rely on his own ability to place his patients’ interests above his interest in the laser, or should he disclose to his patients the terms on which he has the laser? Taking this idea a step further, should there be an independent entity that evaluates offers such as the one ExceLase has made Dr. Smith and then, if approved, provide guidelines for protecting the patients’ best interests?

Dr. Smith chose to provide his patients with a written disclosure statement explaining the nature of his agreement with ExceLase. He found that the disclosure statement relieved him of the burden of self-interrogation regarding his own motives every time the possibility of using the laser arose. He also found the disclosure statement a positive jumping off point for patient education about modern dental techniques.

In spite of human foibles and biases, the dental profession and the public have benefited tremendously from the labor of those involved in research and development. For example, Dr. Smith and his patients have the potential to benefit from the ExceLase offer. However, as in other realms of industry-funded research scenarios, Dr. Smith must balance his interest in obtaining the laser unit with the best interests of his patients. This tightrope act requires the obvious use of the balancing pole of disclosure. As “wet-fingered” dentists, our practical ethical responsibilities to the research community are to be diligent, thoughtful evaluators of the information that is presented to us, to respond in ways that will facilitate further progress, and to continue to hold the research community to a high standard of veracity and resultant trustworthiness. ■

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# ISSUES IN DENTAL ETHICS

Professional Ethics in  
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## CONFLICTS OF INTEREST

David Ozar, PhD, FADC

### ABSTRACT

Conflicts of interest are unavoidable in dentistry. A set of five questions is offered to help sort through such conflicts. The potential harm and the likelihood of such harm caused by secondary interests (the potentially conflicting ones) must be considered against the potential harm and the likelihood of damage caused by withholding services in which secondary interests are present. The use of these questions is illustrated with an example of a researcher who has a commercial interest in the product under study and of dentists who have secondary interests in services provided to patients.

Conflict of interest is a topic that anyone concerned with professional ethics must attend to. But dealing with conflicts of interest properly requires more careful ethical judgment than can be summarized in general do-this/don't-do-that standards. It requires some careful comparative weighing of possible harms in the context of an ethically appropriate relationship between the professional and the person the professional is serving. This essay will examine some of the ethical subtleties of several types of conflict of interest that can arise in ordinary dental practice.

### UNDERSTANDING CONFLICT OF INTEREST

Philosopher Michael Davis provides a useful definition of conflict of interest: "P (whether an individual or a corporate body) has a conflict of interest if and only if: 1) P is in a relationship with another person requiring P to make

judgment in the other's behalf; and 2) P has a[n]...interest tending to interfere with the proper exercise of judgment in that relationship" (Davis, 1998).

Obviously, dentists are in relationships with each person they serve professionally and are required to make judgments on that person's behalf. The question then is whether situations can arise in which the professional has any interests that could interfere with proper exercise of such judgment in that relationship. The general answer is that there are many aspects of the dentist-patient relationship in which the interests of the patient and the interests of the dentist could conflict in the relevant sense. That is, there are many situations in which the dentist's interests could interfere with the proper exercise of judgment on the patient's behalf.

But it would be a mistake to take the view that such conflicting interests are themselves a sign of unprofessional conduct. Conflicting interests are an unavoidable part of life and are themselves neither ethical nor unethical. Indeed, as Dennis Thompson points out, professionals often have "necessary and desirable" interests that are not directed to the person being served. Thompson calls these interests "secondary interests". He calls the interests of the person

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served that are also of specific concern to the professional the professional's "primary interests" in the situation (Thompson, 1993). To manage secondary interests, what is important is to weigh carefully the conflicting interests and their potential to interfere with professional judgment both in terms of the possible harm that the conflict might produce and also the lost benefits that might follow if the conflict were eliminated by ending the relationship or refraining from the decision at hand in some way. More about this subject later.

For this reason, professional codes that include a standard to the effect that conflicts of interest are to be avoided are of little help. The Code of Ethics of the Society of Professional Journalists, for example, includes this directive: "Avoid conflicts of interest, real or perceived." Such a directive is unrealistic and unhelpful for two reasons. First, situations in which peoples' interests conflict occur hundreds of times a day, and there is nothing about relationships between professionals and those whom the professionals serve to make these relationships systematically different, so many conflicts of interest are simply not avoidable. Secondly, as already indicated, the professional's interests that might interfere with the proper exercise of judgment on behalf of the person served, i.e., the professional's "secondary interests," are often themselves necessary and desirable rather than ethically questionable.

In this regard, the authors of the American Dental Association's Principles of Ethics and Code of Professional Conduct and of the American College of Dentists Core Values & Aspirational Code of Ethics have chosen the wiser course. Although both sets of standards indicate in a number of ways that the interests of the patient are ordinarily to be placed ahead of the self-interest of the dentist, neither document includes a general

standard that conflicts of interest are to be avoided. Again, the challenge is for the ethical professional to weigh each kind of situation in which interests conflict on its own merits to determine what is the professional ethical path to follow.

### FIVE KEY QUESTIONS

This does not mean that no guidelines can be offered to assist dentists in dealing properly with conflicts of interest. The thought process that the ethical dentist follows when evaluating a conflict of interest should include consideration of these five questions:

1. Is there any harm that might result from the dentist's secondary interests, and if so, how serious is that harm?
2. How likely to occur is the harm identified in Question 1?
3. If the dentist chose not to act because of the conflict of interest, what benefits would be lost and what harms would occur and to whom?
4. How likely to occur are the harms and benefits identified in Question 3?
5. Which course of action available to the dentist is most likely (taking into account the answers to Questions 2 and 4) to yield the least harm or the greatest benefit (taking into account the answers to Questions 1 and 3), given the professional nature of the dentist-patient relationship?

Before considering examples of the kinds of harms and benefits that might need to be weighed, it is important to stress the role of the final clause in Question 5. The conflicts of interests being examined here are specifically conflicts of interest that occur within the professional context of a dentist-patient relationship. That means that there are other ethical standards that apply to the relationship besides the comparison of benefits and harms outlined in the five questions. The various codes of ethics of professional dental organizations articulate some of these standards, and a much more detailed discussion of them

will be found in Ozar and Sokol's *Dental Ethics at Chairside*, especially in Chapters 4, 5, and 6. These chapters examine the characteristics of the ideal relationship between dentist and patient, the central values to be actualized in dental practice, and the extent to which the patients' interests are to be given priority in the dentist-patient relationship (Ozar and Sokol, 2002). The dentist's careful weighing of potential harms and benefits, which is the path to dealing professionally with conflicts of interest, must be done in the context of these standards to be fully and properly ethical.

### AN EXAMPLE FROM DENTAL RESEARCH

Before examining some specific situations from clinical practice, it will be useful to offer an analogy by examining the ethical judgments involved, both for readers and for authors and editors, in the use of disclosure in the publication of dental research.

What is the potential harm that might come from a professional researcher having a secondary interest, for example a financial interest or an opportunity for

There are many situations in which the dentist's interests could interfere with the proper exercise of judgment on the patient's behalf.

career advancement, in relation to a piece of published research? Clearly, if the secondary interest were great enough, we could imagine it influencing the researcher's professional judgment. We can imagine a researcher overly favoring the positive results of a research program or failing to report negative results if his or her funding for future research or some other fiscal or career benefit were at stake. As a professional, the researcher is committed to telling the world the truth about the outcomes of the research program as impartially as possible. But as a person with secondary financial and career interests, he or she may be swayed to say or to emphasize what the payer or some other powerful entity wants to hear or to omit what the payer does not want to hear. So the direct harm that is potential in such a situation is the incomplete information about the research program that might be produced by such a researcher, and the indirect potential harm is whatever might happen adversely to future patients when dentists depend on such incomplete research reports. Indirect harm can also result to the scientific community if the public perceives that the practices of researchers are self-serving.

How likely are these potential harms? This depends on many factors. It depends clearly on the strength of the secondary interest. How great is the financial or career reward for the researcher, and how closely dependent is it on communicating positive results from the research program? How will the results of the research be communicated? In the case of clinical research, will they appear in a scholarly journal as the results of impartial professional research, or in the advertising of a for-profit corporation whose self-interest in publishing results selectively may be

**But our ethical concerns are raised, even when we are talking about committed professionals, when the secondary interests pass a certain threshold of magnitude.**

evident to any dentist? And how important might the results be to patients' oral health when the results are reported, whether completely or incompletely? Some research will touch few if any patients directly, regardless of how properly reported; other research might impact hundreds or thousands of patients very quickly because of the nature of the research program.

When a dentist reads a research report, as a trained professional he or she must evaluate the dependability of the report before employing its results in daily practice.

The dentist can certainly evaluate the likely impact of the report on patient care and the dentist will typically know the standing of the journal or newsletter as a source of solid scholarly research versus commercial marketing of product lines. But if the dentist does not know the answer to questions about the researcher's secondary interests, the dentist cannot dependably answer important questions about the likelihood that they have interfered with the proper professional judgment of the researcher.

Some of these secondary interests are obvious, of course. No professional researcher acts without concern for reputation, career advancement, and making a living. But these motivators, powerful though they are, are precisely the motivators that are typically placed in proper perspective by professional commitment, so we do not ordinarily expect them to interfere with ordinary professional judgment. But our ethical

concerns are raised, even when we are talking about committed professionals, when the secondary interests pass a certain threshold of magnitude; and this is what the dentist reading a research report will not ordinarily know unless it is specifically disclosed.

Of course, we can imagine a world in which there are no dental researchers who have interests that might conflict with others' interests. However, my guess is that in that hypothetical world of no secondary interests, life as a dental researcher (or any kind of researcher) would be so unappealing that it would be impossible to attract people to the field. The consequence, as suggested by the answers to Questions 3 and 4, is highly unlikely to produce significant development of new oral therapeutics and few new understandings of oral disease and would ultimately result in the harmful decline of the oral health status of the public at large. This would be the "cost" of elimination of the secondary interests altogether, and it would clearly involve so great a loss of benefit to patients that other ways of dealing with the secondary interests are worth pursuing.

Therefore, rather than doing without a relationship that has a risk of potentially harmful conflicts of interest, we design structures to lessen the likelihood that the potential harms will occur. One such structure, in the case of published research, is disclosure of researchers' special secondary interests. These are required to be disclosed first to the editors of scholarly research journals and then to the dentists who use the journals to guide their care of patients.

This is the reason for published disclosure statements in the most respected research journals. The researchers indicate the extent of their secondary interests if these are matters that go beyond the ordinary need for

success, career, and making a living. They are required to do so precisely in order to lessen the likelihood of the potential harm that such special secondary interests might otherwise have. Notice that such disclosures minimize this harm in two ways. First, by informing the readers of the research of the existence of (or the absence of) special secondary interests, such disclosures enable the readers to judge the likelihood that researchers' professional judgment has been interfered with. This lessens the likelihood that incomplete, inaccurate, or biased reports of research will get transferred into dentists' clinical practices and adversely affect patients. But even more importantly, because researchers do not want to develop a reputation for having secondary interests that would interfere with their professional judgment, such disclosures may also function as a significant preventive to researchers having such secondary interests to begin with.

To close this lengthy example, notice that the five questions identified above are asked by three different groups in this story. First, they are used by dentists to evaluate the dependability of the research they read. Dentists know that the answers to the first two questions point to significant and probable potential harm unless researchers' special secondary interests are disclosed. They know how much harm could very well come to pass for their patients if they were to employ research reports in practice uncritically. Therefore, they weigh these facts in order to use research only when it passes critical muster, and in general that depends on their having access to the information that disclosure statements provide.

Second, the five questions are also used by journal editors, whose professional commitments to the oral health community require them to make evaluations very similar to those of the practicing dentist, except that far more patients are potentially involved. They recognize that the oral health community is dependent on the publication of ongoing research in order to provide the best care to patients, so simply not publishing research that involves any conflicts of interest would produce a great deal of lost benefit to patients. They also know that the daily management of disclosure policies and the bare fact of printing the disclosure statements all have costs associated with them that need to be covered. But when they weigh all the factors (Question 5), they recognize that requiring published disclosures of researchers provides the best balance of benefits and harms in the context of the oral health community's primary commitment to patients and also in the context of the research community's commitment to those who care for patients.

Finally, there are the researchers themselves. They, too, ought to be able to recognize the ways in which special secondary interests might interfere with their professional judgment on behalf of patients and the dentists who care for them. But like all of us, they may be overconfident of their own ability to remain impartial; and they will recognize that disclosure involves a loss of privacy regarding their personal business arrangements. But if they are realistic about the possibility of such overconfidence, they will affirm that disclosure for the sake of patients and the dentists who care for them is something of greater value than the value of their own privacy.

ask these five questions carefully in order to deal with a conflict of interest?

One kind of situation is so common, but also so commonly managed ethically, that one might at first think that it may not deserve comment here. This common situation arises from the fact that dentists, like most other professionals in American society, earn their living by their professional service. And the more service they perform, the more money they earn. Perhaps we can imagine a world in which healthcare services are not linked in any way to the livelihood, security, and quality of life of health professionals and their families. But in our society, that linkage clearly is present. This means that we can certainly imagine a dentist being tempted to recommend treatments to a patient not because they are needed, but because they are lucrative for the dentist. This possibility means that, for any thinking person, the answer to Question 1 about possible serious harm to patients is in the affirmative. But the commitment of dentists to practice according to professional standards means that the likelihood that such considerations will interfere with a dentist's professional judgment on behalf of his or her patient is typically very low (Question 2); and patients, therefore, typically entrust their oral health to the care of dentists without great fear of such interference.

This commitment by dentists to place their patients' well-being (their primary interest) ahead of their desire to improve income, lifestyle, and other (secondary) interests is based on recognizing that the risk of secondary interests for patients is both real and significant (Question 1). The only alternative currently available would be to have no one practicing dentistry at all;

#### AN EXAMPLE FROM CLINICAL PRACTICE

What sorts of situations might arise in which a practicing dentist would need to

and the harms and lost benefits of that course of action would be very significant and all but certain (Questions 3 and 4). The potential harms and lost benefits would also be far greater than that inherent in our current system and the occasional harms caused when dentists, for whatever reasons, fail to put secondary interests in perspective on the basis of the requirements of the professional relationship (Question 5).

But there are other circumstances that arise in the practice of dentistry for which the continuing commitment of dentists to practice according to the accepted standard of professional dental practice is not sufficient to lessen the risk of harm from a conflict of interest. An important example of this is the sale of products or services over and above typical dental care.

Dental care typically involves diagnostic procedures, the presentation of a diagnosis leading to a treatment recommendation, and the performance of the mutually agreed treatment. But many dentists also sell dental care goods. Examples of these are oral health compounds like dentifrices, fluoride products, sonic or mechanical toothbrushes, or other oral healthcare devices. These are products that the patient can purchase outside of a dental office and without a prescription. That is, the patient's access to such products is not dependent on the dentist's expert professional judgment in the same way as oral diagnosis and treatment. Furthermore, the patient's decisions in such instances typically involve much more of the patient's own independent judgment. Therefore, the ethical character of this particular relationship becomes ambiguous. It may

be merely a commercial transaction, conforming only to the less stringent ethical standards of the marketplace, rather than a relationship shaped by the standards of ethics professional practice. Should the patient assume that the dentist is as committed to his or her health in this relationship in the same way as in a matter of professional diagnosis and treatment? Without further information, the patient really cannot tell.

That is, with regard to this particular relationship between dentist and patient, because of its explicitly commercial character, harm to the patient is possible (Question 1) and the probability of this harm needs to be considered (Question 2). The patient needs more information in order to make a dependable judgment of the role of the dentist's secondary interests in the transaction. Absent such information, many patients would rather opt out of this particular transaction. That is, they would prefer to buy the products, on the dentist's professional recommendation, at an ordinary commercial establishment where they know the rules of the game, where "let the buyer beware" does not interfere in an otherwise professional relationship. Patients who would make this choice are in effect saying that the advantages of separating the commercial and professional relationships are less risky than combining them (Question 5). In the language used earlier, they are saying it is likely that there is more benefit in forgoing this particular relationship than in dealing with its potential harms. Many dentists who sell such products are themselves aware of the ethical ambiguity of these commercial transactions. They may work to ease the ambiguity by explaining to patients that they sell such products simply as a convenience to their patients, to save them a trip or to assure them that the product they are purchasing is exactly the right one. But such explanations, however reasonable, miss the ethical ambiguity of the situation.

What would be needed to address this issue carefully would be the equivalent of the disclosure statement of the researcher. That is, to lessen the patient's uncertainty about likelihood that the dentist's special secondary interests might be interfering with his or her professional judgment on behalf of the patient, the dentist would need to provide details about those secondary interests. The dentist needs to say, and of course to say honestly, that he or she is not profiting at all from the sale of this product and is providing it at cost (though "at cost" can legitimately include some charge for handling, storage, billing, etc.). Or if there is a markup on the cost of the product, then the dentist needs to say that, like the drug store on the corner, his office adds a 30% markup above cost, or whatever it is. Of course, some dentists who are making a few dollars by charging the usual markup might be embarrassed to disclose that so frankly to their patients. But if so, it would be valuable for them to ask themselves why they would be embarrassed. In any case, the weighing of benefits and harms according to the five questions must be done in the context of the requirements of the professional relationship between dentist and patient. One thing that this implies is that the dentist's privacy is not valuable enough to outweigh the value of the patient making well informed judgments about commercial products that the dentist recommends and, because of ethical ambiguities just discussed, the patient's judgment can hardly be well-informed without such disclosure.

For the dentist's part, of course, the answer to Question 5 might be that, rather than having to make such disclosures to patients, the best way to avoid such ethical ambiguities is to refrain from selling products at markup.



Exactly this same reasoning applies to situations in which dentists are selling healthcare services not directly involving dental care. These might include behavioral health services like smoking cessation programs, weight loss programs, holistic medicine regimes, or any number of other services. The dentist needs to be asking the five questions carefully and needs to be thinking carefully about the data that his or her patients need in order to ask the same questions. It is difficult to imagine that a patient could deal with the ethical ambiguities of such commercial transactions without honest disclosure by the dentist of his or her financial and other special interests in the transaction.

It is worth noting that the published codes of ethical dental practice do not prohibit such commercial activities. This implies that, in the judgment of the authors of such codes, it is possible to engage in such commercial relations with patients, in addition to the provision of strictly professional dental care, without violating one's ethical obligations. But the absence of such a prohibition does not mean that "anything goes." The dental professionals' commitment to regularly place their patients' interests ahead of their own means that the careful judgments about harm and benefit and likelihood called for in the five questions must be part of the dentist's thinking in choosing to engage in these sorts of narrowly commercial transactions with their patients.

By contrast, note that the *ADA Principles of Ethics and Code of Professional Conduct* does identify several kinds of relationships involving conflicts of interest that are so likely to be harmful and are productive of harm of sufficient magnitude within the professional-patient relationship that the only dependable way to limit the harm is eliminate the relationship (by not entering into it in the first place). For

Rather than doing without a relationship that has a risk of potentially harmful conflicts of interest, we design structures to lessen the likelihood that the potential harms will occur.

example, Section 2B1 on second opinions states: "In the interest of the patient being afforded quality care, the dentist rendering the second opinion should not have a vested interest in the ensuing recommendation." Similarly and with even clearer prohibitions, Section 4D1 on contingent fees states: "It is unethical for a dentist to agree to a fee contingent upon the favorable outcome of the litigation in exchange for testifying as a dental expert" and Section 4E on rebates and split fees states: "Dentists shall not accept or tender 'rebates' or 'split fees.'" Thus, the document's authors judge that in such relationships there is so much that is so likely to be lost to patients and arguably to the professional credibility of dentistry that it outweighs any benefits or prevented harms that might come from carrying out such relationships. In other words, the risk of harm from special secondary interests to the professional judgment of the dentist is too great and too certain to be allowed.

### Conclusion

People's interests conflict all the time. The most common and the most effective protection of the interests of those whom the dental profession serves is the established commitment of dentists to practice within accepted professional standards. But situations arise in which this protection of patients' interests is

not enough because of the special secondary interests of a professional in a particular situation. These are the situations that we most commonly identify as involving a "conflict of interest," and these are the situations that require the most careful weighing of benefits and harms of the particular relationship before proceeding. In some such situations, there is too much harm at stake and/or it is too likely to occur. In those situations, the ethical thing to do is to not go forward. But in many such situations, the harm itself or its likelihood can be significantly lessened through thorough and honest disclosure. The five questions provided in this essay can serve as a guideline for the thoughtful clinician trying to determine how to handle a conflict of interest situation ethically. ■

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# Rhetoric

By David W. Chambers, EdM, MBA,  
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## Abstract

Persuasion is the art of giving others reasons to believe you. Classically, the three elements of rhetoric have been evidence or a strong case, connecting with and honoring the feelings of the audience, and character—the person and the message always come together as a package. Twenty types of common abuse and misuse of rhetoric are discussed. Rhetoric involves the ethical principle of allowing others to believe without forcing them to do so. It is essential to democratic societies.

Rhetoric is the ancient and honorable art of persuasion. It would be good for dentistry and for democracy if this art were more effectively practiced in America.

The essence of persuasion is marshaling evidence to change what others believe and are willing to do. The primary purpose of editorials, research papers, and advertisements is rhetorical. Speeches that advocate a position or action and most discussion in meetings are similarly intended to change others' views through argument. It is surprising how much "informal" conversation at the airport or a professional reception has this same motive. Americans have abundant opportunities to persuade, and even more to decide whether rhetoric aimed in their direction has any merit.

## What is Rhetoric?

Persuasion occupies a middle ground between threat and seduction. Although we talk in a loose sort of way about "persuasive arguments" such as a mugger's knife or a judge's order on one hand and a picture of a drop-dead gorgeous handpiece or a flattering remark on the other, these do not meet the strict qualifications for the category. The criteria for persuasion include: 1) causing others to change or substantially modify what they are prepared to do; 2) because they choose to make a change; 3) based on reasons presented to them. In the case of the mugger or the judge, we have no choice; in the case of the subliminal message, we do not make a conscious choice.

The essential element in persuasion is known technically as a "case." It is an organized presentation of reasons, appeals to emotion, and signs of credibility. An ad is certainly a case; but so is a short remark in a meeting. When a question is asked whether the previous speaker's data refer to all the children in the state or just those covered by CHPS and the response is mumbled, the questioner has made a successful persuasive case. The fact that these incisive comments qualify as persuasive remarks demonstrates skill in taking advantage of an already existing structure.

Cases are sometimes also called arguments, meaning the set of reasons intended to persuade, not the mindless exchange of self-justification and personal invective without listening to others. Persuasion aimed indirectly at a general group who do not interact with the presenter used to be known as propaganda. Now we tend to call this "mass communication" and reserve the term propaganda for rhetoric whose message we disagree with. Even the term "rhetoric" has drifted onto hard times. A "rhetorical question" is not a question at all; it is a sometimes biting suggestion—"Who can't recognize the dangers of dental insurance?" Perhaps the very word rhetoric evokes memories of a class in high school that taught some useless rules for public speaking. The misuses and abuses of rhetoric are common enough to have given the art a bad reputation. A catalogue of the more common unintentional and purposeful bad practices will be taken up later in the essay. But since rhetoric is ubiquitous

but hard to handle, something needs to be said about making it work better.

The skill flourished about 2500 years ago, and we know most about its development in classical Greece. Rhetoric is actually a Greek word meaning only the art of using words effectively. In small city states, there were few laws and much opportunity to talk about who owed what to whom or whether harbors should be built or wars fought. Professional classes and civil servants had not emerged. Men had to speak for themselves, and the fact that this was done in public led to standards for identifying when it was being done well. It also led to schools for teaching rhetoric as well.

Classically, rhetoric contained three indispensable parts: logos, pathos, and ethos. These translate roughly as logic, ethics, and emotion. Effective persuasion for those who looked at it first meant that the speaker had to present sound evidence, be of high personal character, and appeal to the interests of his hearers. Quintilian, a first-century Roman teacher of rhetoric, defined oration as “a good man speaking well.” Gradually, we have come to lay heavy stress on appealing to other’s emotions while reason often gets a rough ride. The character of a speaker is now seldom part of what it means to be persuasive. Restoring the classical balance may be just what is needed to recover the art of speaking well.

#### Reason (logos)

Rhetoric allows others to accept a view as justified; it is the business of supporting claims with evidence. When the reasoning is compelling enough, listeners and readers will change their minds. The executive director of the American Dental Association makes a case for very high membership in the organization based on the power of a unified professional voice. A Fellow in the College nominated a deserving colleague for Fellowship by enumerating his or her qualifications. An anti-amalgamist cites the research and principles of liberty he or she believes justify a certain position. One of the best places to study attempts at persuasion based on reason is in the letters to the editor of newspapers and journals. There we see the full range, from “you may wish to consider your choices in light of this information” to “you are wrong because I feel very strongly that you are.”

Effective use of reason should satisfy five criteria: 1) Evidence should be provided; 2) it should be of good quality and 3) not misapplied; 4) it should be an attempt to find common ground with the listener or reader; and 5) it should be the real reason for making the claim.

It is an insult to expect others to change without explaining why you think that is appropriate. The intentional and accidental twisting of reason is such a large topic that it is discussed separately below. Quality of evidence is concerned

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with whether the claim could be avoided based on challenging the source or nature of the reason alone, without worrying whether it is actually applicable to the argument. Citing a 1970 survey to demonstrate a shortage of hygienists will be unpersuasive, even when there really is a shortage of hygienists. An “expert” who lacks credibility will damage a case. Table 1 contains a list of some commonly expected characteristics of good evidence.

The fourth criteria for sound reasons is more subtle; and a frequent source of well-intended people “talking past each other.” Finding common ground in persuasion is a matter of framing the issue. Without agreement on the question to be addressed, even strong arguments are wasted. California recently passed a law requiring dentists to inform patients of the contents and characteristics of various materials used in dental treatment. The profession resisted this measure, which requires that patients receive and acknowledge receipt of a multi-page,

rather technical document by presenting evidence of the known safety of the materials involved. Those who advocate the regulation based their argument on the liberty of free and informed choice. Framing the issue in scientific terms failed. A better argument would be that patients have some personal responsibility to be informed (which is actually very easy in these days of the Internet) and that those who feel strongly about this should not require that the public as a whole (including the vast majority who trust the profession) should not be forced (without their own choice) to pay for this information. The political process is inherently a matter of rhetoric, and one of the first rules should be to make certain the debate is framed correctly.

The famous early twentieth-century lawyer and several times presidential candidate William Jennings Bryan is supposed to have said, “It is a poor mind that can’t fix up good reasons for doing what it wants to do.” What he was

referring to is known technically as rationalization. Good persuasion is free from such “fake” reasons. Issues are complicated, and the same action can often be supported from multiple perspectives, some of which are honorable and others less so. For example, the “Dental Materials Fact Sheet” had support from some trial attorneys in California. They argued that they were protecting the public; their behavior was also perfectly consistent with increasing their opportunity to earn money by suing dentists who fail to comply with these regulations. The professional association of veterinarians in British Columbia, Canada, have recently revived two standards common in medicine about a hundred years ago. They want to enforce a minimum fee schedule and to exclude from licensure those who are new to the province and cannot pass a test in English. They argue that both measures are necessary to maintain acceptable levels of care for animals. The rapidly growing Indo-Canadian Veterinarian

Table 1. Characteristics of Good Evidence

Rules to follow when gathering evidence: gather enough evidence, seek a variety of evidence, and document the evidence carefully.

Source	Rules
Observations	Have a definite purpose, an honest attitude toward the problem, and a record that ensures accurate memory.
Witnesses	Be in a position to observe clearly; be physically able to observe, possess the intellect to understand and report. Rules to follow when gathering evidence: gather enough evidence; seek a variety of evidence; document the evidence carefully; and be morally prepared to report only what is seen.
Facts	Clearly accessible to observation; reported completely; may be checked by others; internally consistent; consistent with other known facts; and probably true.
Personal opinion	Be based on a clear understanding and systematic study of available evidence and careful testing where possible.
Authority reference	Specific and from those who are qualified to give opinions, who are in a position to know the facts, and who are aware of the significance of their opinions.
Statistics	Having the characteristics of being comparable, indexed to what is already known, designed to reveal the most essential characteristics, covering a sufficient number of cases.
Examples	Not be chosen to support a preconceived conclusion; fairly representative of their class, include the possibility of contrary examples; consider a large enough set to support generalization; be subject to verification; and wherever possible; be consistent with other evidence.



Society argues that these measures are anticompetitive. The debate will not be decided based on which argument is sounder; it will hinge on which argument is more believable.

In persuasion, there is seldom a single, knock-down winning argument. Listeners and readers look for the preponderance of reason. It is an inductive process, where evidence accumulates and points in a specific direction. But it would also be unfair to say that the number of reasons given determines the outcome of an argument. Some writers on the topic suggest that those who listen to a persuasive case use logic something like this: "If I acted on these views, I could confidently predict certain, desired outcomes." This resembles the hypothetico-deductive logic of science—"this principle or theory is true in the sense that it explains important patterns of results." Persuasive individuals are those who make it easy for others to believe what is useful.

#### Empathy (pathos)

It would be more accurate to translate pathos as emotion than empathy, but that would miss the point. Persuasive messages must fit the audience. One is attempting to change the listeners' views, not the speaker's.

If you want to understand American dentistry today, pick up a copy of *Dental Economics* or *Dentistry Today* and read the ads. The articles would be less informative for these purposes, and the *Journal of Dental Research* would be entirely beside the point. Industry may spend more than the ADA on understanding what practitioners are like. In the past fifty years, psychologists have made strides in finding out what motivates various groups of people under various circumstances, and most textbooks on rhetoric and public speaking are rich in this literature. As Brembeck and Howell,

to cite just one such example, put it, "We can show people how to get what they want."

But persuasion is not pimping. Rhetoric must honor the understanding and values of the audience as a starting point; it is not bound to accept them as limits. If there are differences of interpretation between speaker and listener, persuasion succeeds when it explores these differences in an honest fashion. Words do not change events, but they do color the interpretation and meaning of events.

The psychology of persuasion has been addressed in previous leadership essays in this journal (Spring and Winter 1996, Spring 1997, Spring and Winter 1999, Winter 2000, Spring 2002, and Spring 2003). A few quick tips include: promote what you want people to do rather than trying to talk them out of things you don't want them to do; establish a pattern of positions listeners can easily agree with before introducing controversial ideas; look for common ground between you and the audience; repeat often enough to keep the important points in the audience's attention; and make it easy for the audience to abandon an old idea without losing face.

One of the dangers of basing persuasion on emotion is the instability of our psychological states. Every good salesperson knows that the customer must commit to an action or the good intentions of their emotion-based enthusiasm will evaporate. Think, for example, how persuasive various innovations in practice appeared while at the state convention or the ADA meeting and then how much less persuasive they appeared a few weeks later. Persuasion grounded in rational arguments tends to be more stable.

Quintilian, a first-century Roman teacher of rhetoric, defined oration as "a good man speaking well."

The other danger in overemphasizing emotion as an element in persuasion is the antagonism that exists between reason and emotion. Feelings tend to short-circuit thoughts. Have you ever tried to reason with a patient who is angry? Conventional wisdom says manage emotions before addressing reason. There is some research evidence that audiences cannot distinguish between argument based on reason and arguments based on emotion. Speeches were given to various audiences combining emotional and rational arguments. Both were picked up, and the audiences could not identify whether they accepted the positions based on emotional or rational grounds. Emotions seem to grab the binding sites in persuasion, preventing logic from taking hold.

#### Character (ethos)

Why was the endorsement from Al Gore, the man who lost to George W. Bush, of so little value to candidate Howard Dean? Why did Rachel Carson, who was dying of cancer, electrify the nascent ecological movement with her publication of *The Silent Spring*? Why do we smile when we hear the expression, "I'm from the government and I'm here to help you?" Truly, who we are speaks louder than what we say.

Character is the forgotten element of rhetoric, but it may well be the most powerful. To play a little with Quintilian's remark quoted earlier, an individual of questionable character speaking well is slick. Both despite and because of their loquacity, Mussolini, Painless Parker, and some electronic evangelists have been judged by history as demagogues.

Two of the unwritten rules in rhetoric are that audiences assume those who

are attempting to persuade then will use unbiased reason and believe that their message is of value to the audience. We don't want to be taken in, no matter how skillfully it is accomplished. In his book *Rhetoric*, Aristotle notes, "Persuasion is achieved by the speaker's personal character. When the speech is so spoken as to make him credible, we believe the man more fully and more readily than others." Winston Churchill and Abraham Lincoln are two examples of statesmen who were powerful persuaders despite being difficult to listen to. Listeners understood that they spoke from the center of their convictions.

When hearing or reading someone for the first time, audiences rely initially on reputation if it exists; but soon they begin to form impressions from the message and its delivery. Apparent competence, efforts to establish credibility, good will, awareness of the concerns of the audience, and the dynamics of delivery all go into the mix to judge character. Here is a problem: we use the quality of delivery to judge the quality of the message and vice versa. That explains why lack of harmony between content and presentation are usually fatal, but an apparently honest, purposeful, confident, and considerate delivery can promote an exaggerated sense of character.

The classic example of mistaken perceptions of character is the famous Dr. Fox lectures. In the 1960s, researchers at the medical school at the University of Southern California trained a Hollywood actor to present a lecture in methods of diagnosis. The presentation was judged highly credible by physicians who attended the CE course. In fact, the fictitious Dr. Fox was rated as being more of an expert than was a real physician delivering the same material. Physicians even claimed to have heard of Dr. Fox and to have read some of his scientific papers. The medical community was irritated (remember, no one likes to

be taken in) and branded the whole line of research as a hoax in poor taste. Subsequent experiments proved that physicians actually learned more useful material from Dr. Fox than from the real expert, but public outrage has pretty much covered that up. (Lest readers think I am being inconsistent in citing research that appears to demonstrate effective persuasion by one of doubtful character, recall that Dr. Fox really was trying to communicate in an effective way material that was of value to the physicians. The physicians were concerned about something else—people whom they had not blessed as experts should not pose as experts, no matter what their motives or their effectiveness.)

#### Misuses and Abuses of Persuasive Communication

Rhetoric has become synonymous in some peoples' minds with tricky speech. We have a branch of the U.S. government (the Federal Trade Commission) that spends billions of taxpayer dollars regulating advertising claims. Some professions have a reputation for burying the substance of doubtful arguments in strategic language. The medical research community is scrambling to create standards that balance the needs of those paying for the research and those relying on its results. Dental editorials, especially those that preach to the choir, can be richer in smoke than light.

There have always been teachers of rhetoric and orators who could put the best face on a bad case. Sometimes this is done by accident, when careless reasoning or the excitement of making an important point causes a rhetorical tool to be misused. Often enough it is done intentionally—an abuse or purposeful attempt to change other's views by greater reliance on the presentation

than the merits of the case. This can be illegal (fraud), quasi-legal (misleading advertising that leads to retraction rather than prosecution), unethical, or “pushing the limits.” These practices are so common that many have specific names. The practices that “push the limits” are also sanctioned in commerce (caveat emptor) and in law (the adversarial system). A sampling of rhetorical abuses is found in Table 2.

The first seven abused techniques of rhetoric are classics. They were identified in 1937 by the U.S. Institute for Propaganda Analysis and guided much of the War Department and later university research. One cannot get through a commercial dental journal without encountering all seven, sometimes most of them on a single page. A string of adjectives such as “proven effective,” “fastest,” and “amazing” (glittering generalities) are regularly combined with transfer (“university studies demonstrate”) and testimonials from dentists and from patients. The bandwagon tool is more subtle, but it is common for ads to include words such as “widely accepted” or “popular,” which imply that those who do not use the product are being left behind. The plain folks tool is represented by examples of “wet-gloved” dentists, and, almost by definition, advertisements display the cards stacked in favor of the product. Name-calling normally avoids direct references to competitors, but I have seen comments like, “Tired of the ‘Three-Step Bonding Mambo?’”

The four types of misleading facts mentioned in Table 2 all work by taking a statement that is literally true in some small or special context and placing them in a larger context or leaving them

Table 2. Common Misuses and Abuses in Persuasive Communication

Technique	Example
<b>Propaganda</b>	
Name-calling	Their view is a bodacious boondoggle.
Glittering generality	My widely-endorsed proven innovation...
Transfer (borrowed authority)	The eminent Harvard professor Szmuckeez holds...(only “They” are more often quoted)
Testimonial	Dr. Guru did 20,000 successful cases with...
Plain folks	All of us who have been through this together...
Card stacking	All of the evidence I have been able to find that is worth citing points toward...
Bandwagon	All the smart practitioners are...
<b>Misleading with Partial Facts</b>	
Undocumented assertion	It is widely known that...
Misleading percentages	There was a 200% drop (from 2 per 1000 to 1).
Faculty analogy	Advertising dentists are prostitutes and should be arrested.
Overgeneralization	Don’t admit her to school, women don’t practice as long as men do.
<b>Misplaced Attack</b>	
Straw man	I define EBD this way, and therefore it is easy to refute.
Denied right to speak	My opponent is not a dentist, therefore none of her arguments about dentistry are valid.
Ad baculum	If my advice is not followed, someone will pay.
Ad hominem	My opponent is stupid, deceitful, and money-grubbing.
<b>Poor Logic</b>	
Modus ponens	Incompetent dentists can’t do Class IIs; this candidate for licensure didn’t do a good Class II; therefore the candidate is incompetent.
Correlation as causation	Both times we removed the amalgams the patient’s hives subsided; therefore amalgam causes hives.
Disproving the opposite	We revealed the flaws in the study that attacked our product, so our product is proven effective.
<b>Counterfactual Confusion</b>	
Hypothetical made true	Imagine the case where...so we must stop that.
Catastrophizing, slippery slope	There may be no evidence now, but if we don’t stop this, who knows what might happen.

where hearers and readers might assume that they mean more than they actually do. Changing context is one of the problems in all logical reasoning. It can happen to the well-intended but unsuspecting. Failure to recognize that facts change meaning when the move to different contexts is one of the largest impediments to rational discussion.

Another group of tools that involve shifting context are the misplaced attacks. In this case, however, they are almost always used intentionally to draw attention away from the weaknesses in one's own case. The straw man is a caricature of an opposing argument, set up to be easily demolished. Third-party payment programs are occasionally criticized this way. The red herring is chasing an incidental issue instead of the main point. One of the most common versions of the red herring is to note that an author has a commercial interest in a material or technique or that a product is supported by research funded by the manufacturer and then reject it out of hand. (A rational critique is based on the functioning of the technology, not its sponsor.) The term "red herring" refers to the practice of confusing the hounds in a fox hunt by dragging fish through the field. Challenging another's credentials or precluding their opportunity to address the issue is a failure to engage on the issue. *Ad baculum* arguments are threats. *Ad hominem* arguments are attacks on the character of one's opponent rather than criticisms of his or her position. All three of the latter are clear signals that those using them have lost the argument.

Persuasion is the art  
of giving good reasons;  
it is neither the art  
nor science of  
controlling other's  
feelings or behavior.

Anyone can be tripped up by poor logic. A common example has the Latin name of a type of syllogism. Sound logic allows for the following reasoning: If A, then B; A; therefore B. Initial licensing agencies often misapply this syllogism in the following way. Incompetent dentists make technique errors, a particular candidate for licensure makes a technical error, therefore, the candidate is incompetent. This reasoning follows a different and illogical line: If A, then B; B; therefore A. Some examiners do not admit the possibility that they may be mistaken in classifying the competency of candidates. There are many examples in this category; two of the most common are concluding that event A causes event B, based on the observation that they are often seen to occur together. (It might be the case that B causes A or that C causes both.) Disproving a statement does not prove that its opposite is true.

A final category concerns the mismanagement of hypothetical statements. The slippery slope argument sounds something like this, "If you give them an inch they will take a mile." In its extreme form, catastrophizing paints the worst imaginable picture as though it were an inevitability. Quacks and fanatics have a deep bag of such arguments. Another variation on this abused tool is to state a hypothetical situation and then slip into assuming that it has taken place and that measures must not be taken as a result.

## Democracy, Ethics, and Rhetoric

There is a story about two Chinese workers on the California railroads who came to a difference of opinion. They argued rather bitterly for a long time. A Yankee who observed the marathon struggle wondered out loud why this hadn't degenerated into physical violence sooner. He was informed by someone who knew better that the first to resort to violence was admitting that he was not a rational person.

There is an inherent relationship between rhetoric and democracy. There is no premium on developing ways to make reasonable cases for change where no change is possible or where segments of the country or the organization are excluded from proposing change. Rhetoric, as the art of persuasion, first emerged in the democratic city states of Greece and disappeared as Rome transitioned from a republic to an empire. There were no orators in the tenth century anywhere in the world. The Enlightenment that led to the American Revolution reintroduced the notion of personal freedom to speak one's mind and to make up one's own mind and the notion of rhetoric that accompanies it. Thomas Jefferson expressed it in these words, "No experiment can be more interesting than that we are now trying and which we trust will end in establishing the fact that man may be governed by reason and truth."

Some years ago I had a difference of opinion with a leader of a national organization in dentistry. It was his opinion that the pressures on dentistry as a profession justified the position that they should be given only certain information on matters of policy so as to develop a united voice. I remain



unconvinced and continue to believe that dentists are intelligent enough to make up their own minds about what is true and useful if given a diverse range of honest information. You will see my view reflected in the editorial policy of this journal.

There are ethical issues involved with rhetoric. One has been mentioned already, the need to avoid misuse and abuse of the tools of persuasion. This can be summarized as “tell the truth when attempting to persuade others.”

But the ethical territory of rhetoric extends further. Persuasion should be grounded in character. The rule should be: “Say what you believe is true and why you think so, not what you want to be true and what will make others believe it.” The difference between these two positions is not slight. Anyone who wishes to take a public position should consider whether they will emerge from the attempt with a greater or lesser statute than they now enjoy. If they honestly believe that what they have to say would be useful to the public good and the personal advantage of others and that there are rational persuasive means of communicating, they should speak up. Otherwise they will, as the French say, have missed a wonderful opportunity to have kept quiet.

There is yet one deeper level of ethical consideration in rhetoric. Persuasion is the art of giving good reasons; it is neither the art nor science of controlling other’s feelings or behavior. Making someone an offer they cannot refuse is not persuasion; it is coercion. There is a limit in rhetoric—those we talk to must be free to choose to accept or not accept our case. Great damage follows from trying to go beyond that limitation. When we do so we convert others into tools of our will; they become means and not ends in their own right.

One final story. In a leadership class at the executive MBA program at Harvard, a professor asked mid-career executives to introduce themselves and described their leadership experience. A woman who had managed service organizations described the frustrations of getting volunteers to follow through, of partial successes in securing philanthropic funding, of regular tussles with regulatory agencies, and even of the disappointment of working with clients that were not always appreciative. Her optimism in the face of mixed success and failure were characteristic of many of the members in the class. The last to introduce himself was a colonel, who manifested an edge of disdain. “I’ll tell you what leadership is,” he said. “When I say move the motor pool to the other side of the camp, it is moved immediately. When I need a report, I get it right now.” The professor thanked everyone for his or her stories and gave the opinion that there was a generally very high general level of leadership in the group already. The only one he felt had no leadership skills was the colonel. He only had command experience.

Ethically we can only attempt to persuade others, not force them to change. Rhetoric is the art of a person of good character presenting his or her case honestly to that end. ■

In persuasion, there is seldom a single, knock-down winning argument. Listeners and readers look for the preponderance of reason. It is an inductive process, where evidence accumulates pointing in a specific direction.

## Recommended Reading



\*Auer, J. Jeffery (1969).

***The Rhetoric of Our Times***

New York: Appleton-Century-Crofts.

No ISBN; 493 pages; price unknown.

An anthology of speeches and papers about speeches. The sections of the book include listener attitude (an interesting exploration of the shock rhetoric of the 1960s), fundamental concepts in rhetoric, some psychological studies of communication, and a section of speeches.

\*Blankenship, Jane (1972).

***Public Speaking: A Rhetorical Perspective***

Englewood Cliffs, NJ: Prentice-Hall.

ISBN 0-13-738906-X; 361 pages; price unknown.

Persuasion is viewed giving reasons that are recognized as "good." The basic parts of the classical rhetorical art—*invention*, *arrangement*, *style*, *memory*, and *delivery*—are used to provide the structure for

the book. This is a college text and ranges from practical suggestions for memorizing the speech to detailed discussions of the psychology of perception.

\*Brembeck, Winston L. and Howell, William S. (1952).

***Persuasion: A Means of Social Control***

Englewood Cliffs, NJ: Prentice-Hall.

No ISBN, 488 pages, price unknown.

Persuasion conceptualized as the use of reason, character, and emotional appeals to impact others' motives for change. The book contains suggestions in each of the areas of the definition. It is a textbook for a college speech course in the 1950s.

Naftulin, D. H., Ware, J. E., Jr., & Donnelly, F. A. (1973).

***Journal of Medical Education***

Vol. 48, 630-635.

The research study that annoyed the medical continuing education community so much by demonstrating that a Hollywood actor could be trained to give a CE course that was better received than the same course given by a physician. Later studies showed that attendees actually learned more from the expert in presentation than from the expert in the subject matter.

Ross, W. D. (1960).

***Aristotle: A Complete Exposition of His Work and Thought***

New York: Meridian Books.

A comfortable introduction to the western world's first encyclopedic thinker, his times (the fourth century BC in Athens), and the scope of his thought. Especially relevant here are Aristotle's *Rhetoric* and his *Poetics*.

***\*Editor's Note***

Summaries are available for the three recommended readings preceded by asterisks. Each is about four pages long and conveys both the tone and content of the original source through extensive quotations. These summaries are designed for busy readers who want the essence of these references in fifteen minutes rather than five hours. Summaries are available from the ACD Executive Offices in Gaithersburg. A donation of \$15 to the ACD Foundation is suggested for the set of summaries on democracy; a donation of \$50 will bring you summaries for all the 2003 leadership topics.



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