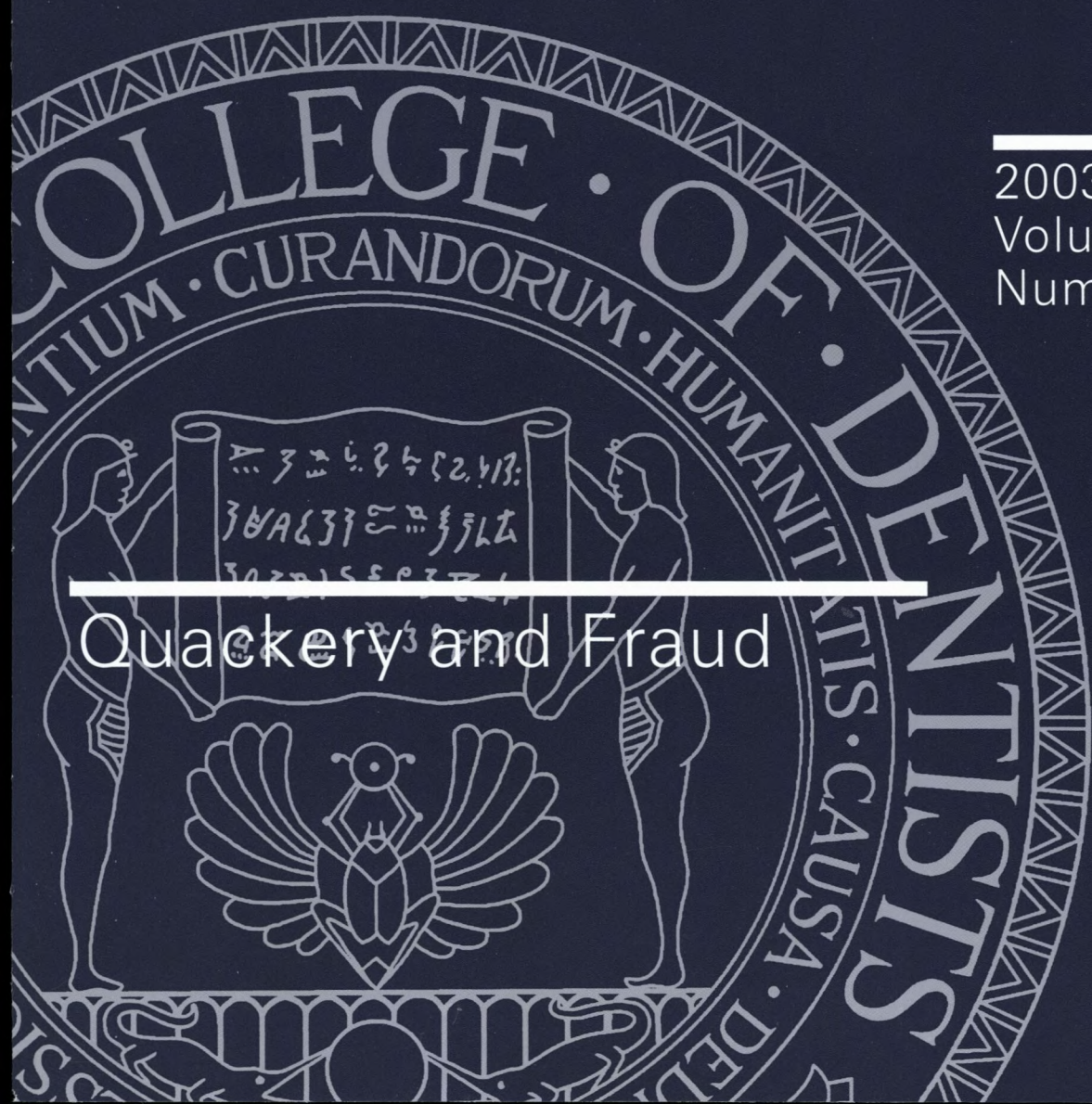


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2003
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Quackery and Fraud

The seal of the American College of Dentists is a circular emblem. The outer ring contains the text "COLLEGE OF DENTISTS" at the top and "CAUSA" at the bottom. Inside the ring, the Latin phrase "CURANDORUM HUMANITATI" is written in an arc. The central part of the seal depicts two figures, a man and a woman, standing on either side of a large scroll. The scroll contains text in a non-Latin script, possibly representing a historical or foundational document. Below the scroll is a large, stylized insect, possibly a fly or a beetle, with its wings spread. The entire seal is rendered in a light color against a dark background.

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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THE AMERICAN COLLEGE OF DENTISTS, in order to promote the highest ideals, develop good human relations and understanding, and extend the benefits of good oral health to all, declares and adopts the following principles and objectives as ways and means for the attainment of these goals.

- A. To promote within the dental profession the highest ethical standards, stimulate interprofessional relationships, urge upon the professional person recognition of his/her responsibility to participate in the affairs of society as a citizen of the community;
- B. To take an active role in the support of dental education and research;
- C. To encourage qualified persons to enter the profession of dentistry;
- D. To encourage graduate education and improve continuing educational efforts by dentists and auxiliaries;
- E. To encourage the free exchange of ideas and experiences in the interest of the patient;
- F. To foster the extension and improvements of measures for the prevention and control of oral disorders; and
- G. To confer Fellowship in the College on individuals in recognition of meritorious achievement and their potential for contributions in dental science, art, education, literature, human relations, and other areas that contribute to human welfare, and to give encouragement to them to further the objectives of the College.

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FROM THE EDITOR

Rights and Goods

They sound pretty much the same, but rights are different from social goods. In fact, what is good for communities or the nation as a whole often runs into what individuals may feel is their due. A minimum level of education, helmet and liability insurance laws, and national security are examples of social goods. Some believe these goods abridge their individual rights.

provide financial support to the most vulnerable of their citizens as a social good to obtain minimal levels of health status. The investments society makes in its public goods vary with available resources, demands from competing public goods, the winds of political policy, and evidence regarding the efficacy of various approaches.

Access, diversity, cultural competen-

Promote Oral Health (USPHS)—partnerships are needed to develop scientifically sound, integrated, and evaluated approaches to improving oral health, and *Improving the Oral Health Status of All Americans* (ADEA)—dental education should take the leadership role in guaranteeing oral health rights for Americans.

Three of those reports are explorations of oral health as a social good; one is a call for advocacy for patients' rights to access. Three of the reports make a lot of sense to me.

The report from the American Dental Education Association states, "Access to basic oral health care is a human right." The ADEA sees its role in this as teaching cultural competency, becoming an alternative delivery system to private practice, requiring a mandatory residency year of training, increasing the diversity of the profession, and opening practice acts to allow those who are

The logic of social goods is based on public agreement about allocating common resources for a greater common good.

Rights include the "freedom from" statements in the Bill of Rights, Roosevelt's Four Freedoms, and the code of common law known as Civil Rights. There are few positive or entitlement rights. These, such as education, involve obligations. Unlike healthcare, there are laws requiring both the provision of education and the obligation to attend.

The logic of social goods is based on public agreement about allocating common resources for a greater common good. Educating dentists is an example. States use tax money to subsidize all forms of professional education because practitioners contribute to the health of society and to state tax rolls. States also

cy, open practice acts, and safety nets are the stuff of current editorials. The millennium has also proven to be a rich time for national reports. Four of the most important include: *The ADA Future of Dentistry* (ADA)—partnerships

Self determination is not the same as determining for society as a whole what is in its best interests.

should be developed to address access concerns, *The Surgeon General's Report* (USPHS)—oral health is part of overall health but segments of our country have less of it, *A National Call to Action to*

not trained as dentists to provide more oral health care. Dental schools are to "advocate" for state and federal funding, interdisciplinary training with medicine, funding for minorities, federal

replacement for declining Medicaid and CHIPS revenues, loan forgiveness, GME support, a required year of service, and reform of practice acts.

The data on the burden of oral diseases and disparities should be familiar to all: More than a hundred million Americans without dental insurance, and a third of the population with no access to water fluoridation; caries as the most common chronic childhood disease; more than fifty million school hours and three times that number of work hours lost to dental disease. A quarter of poor children have not seen a dentist by the time they enter kindergarten; the importance of insurance as predictor of seeking care, coupled with reduced coverage among the poor and the elderly; and lower availability of dentists in poor and rural areas.

Dentists who are net contributors to the social good should be applauded. No one should require that they work for the rights others envision.

The politicians probably know these numbers better than dentists do. Their folders on oral health impact are right beside the binders on other health issues, child care, industrial and recreational safety, gender inequality in the workplace, toxic waste, transportation. Greater resources for oral health makes sense if there is likely to be a greater

social benefit from these investments than there would be from investing in transportation, literacy, sanitation, etc.

The ADEA position paper is grounded in the concept of the "good society." This is the sound argument that profes-

Serving as a labor force has never been part of the university compact with society. Neither has political advocacy been part of higher education's mandate.

sionals are granted privileges such as self-determination in exchange for placing patients' or the public's interests above selfish concerns. Self determination is not the same as determining for society as a whole what is in its best interests. Of the four position papers

nation's oral healthy needs" and that schools should serve as "effective providers, role models, and innovators in the delivery of oral health care to all populations." Serving as a labor force has never been part of the university compact

with society. Neither has political advocacy been part of higher education's mandate. The academy should find better ways to address social needs, question the assumptions of society by pointing out the outcomes of complex issues, and pass on useful knowledge to the next generation of young men and women. Because all but two American dental schools are state supported and tax exempt, it would represent a conflict of public trust for them to engage in advocacy.

Dentistry has a proud tradition of public service. Fellows of the College and most of my practicing friends are mindful of the benefits they are granted by society and they give back in high quality care, donated services, and public and professional service—impressively so compared to the typical American. Dentists who are net contributors to the social good should be applauded. No one should require that they work for the rights others envision.

referred to in this editorial, the only one that did not include public input was the one prepared by educators.

The ADEA paper states that "the traditional model of oral and dental care, namely that of the solo practice dentist assisted by allied dental personnel providing care under the dentist's supervision, is no longer adequate to address the



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

Taking a Stand Against Fraud and Quackery in Dentistry

Kenneth E. Follmar, DDS, MSD, FACD

The Board of Regents of the American College of Dentists has for the past several years been addressing an especially complex ethical issue. This thorny problem involves unsubstantiated dental care, unconventional dental treatment, dentistry that is not in the best interests of patients, fraud, and quackery. Responsibility in this matter stems from the ACD mission

exists uncertainty as to what is and is not ethical because some practitioners feel that a gray area really does exist. Some dental professionals take advantage of what they consider to be the gray area. They push their conduct to the limits of acceptable ethical practice and common sense. But there are a few who far exceed that limit. These few lost souls must be shown the way to appropriate behavior.

always be foremost. Integrity has merit.

The ACD by itself does not have the economic resources essential to resolve this ongoing complicated issue. However, by identifying the problem and repeatedly drawing attention to that problem, we can provide motivational guidance to like-minded organizations. Leadership is the key. The College functions as an engaged steward of well defined ideals.

Mainstream dentistry must participate if unethical behavior is to be controlled. Dental organizations as well as individuals must dedicate time and economic resources to help control ongoing unwarranted treatment, quackery, and fraud. That problem is formidable and challenging. Ordinarily, chronic ethics offenders are removed from membership in professional organizations. This solves little. These offenders are the very people who need the guidance, positive influence, and support available from

Unethical practitioners do not care to hear the message that competence includes appropriateness of care as well as quality of care, and that the needs and interests of the patient must always be foremost.

mandate to promote excellence, ethics, and professionalism. The College has a commitment to draw attention to problems involving ethical and moral values. The initial approach has been to develop and publish a defining position paper, one that is strong and spells out the wrong, while at the same time offering direction for positive action.

The entire issue is strictly one of ethics, which Webster defines as "the discipline dealing with what is good and with moral duty and obligation." Ethics is simply the accepted standard of professional conduct. In some minds, there

The problem is that these troubled practitioners appear to have a memory of convenience and wear a patch over the good eye.

The College was founded to elevate the ethical standards of dentistry. The ADA Principles of Ethics have been adopted as part of the Code of Ethics for the College. Despite that detailed code, dealing with unethical behavior remains frustrating. Unethical practitioners do not care to hear the message that competence includes appropriateness of care as well as quality of care, and that the needs and interests of the patient must



Dr. Follmar is Immediate Past-president of the American College of Dentists. He lives in Saratoga, California.

organized dentistry. Membership loss does not change their behavior. We must take another look at current disciplinary procedures in search of better and more creative solutions.

A number of preventive and remedial initiatives are available for managing unethical behavior:

1. Our dental schools must participate. Teaching the principles of ethics should be a part of the very first year of dental school. Formal courses, emphasizing long-term, lifetime moral issues are essential. With clinical application, such courses should continue throughout each remaining year of dental education.
2. The force of law is essential in controlling unsubstantiated care, unconventional treatment, fraud, and quackery. State dental board regulations, wisely and vigorously enforced, will positively impact practice behavior.
3. National Dental Board examinations should dedicate a section of the licensing examination to ethics and morals.
4. Courses in ethics should be required

as part of mandatory continuing education for relicensure. If such a requirement does not exist, state dental associations have an obligation to establish that requirement through their state dental licensing authority. This requirement can be instituted administratively. No change in the dental practice act would be required.

unethical behavior within its community, the attention of the local dental society should be drawn to the problem.

Over the years the College has contributed much toward improving dental ethics, yet it obviously has a distance to go. The position paper offered here should have a positive and creative impact.

The problem is that these troubled practitioners appear to have a memory of convenience and wear a patch over the good eye.

5. A profession has the responsibility of self regulation. Both general and specialty dental organizations, as well as individual dentists, should be involved in controlling ethics infractions. Clear-cut cases of ethics malfeasance should be reported to the state licensing authority.
6. One significant function of ACD sections is to promote the principles and objectives of the College at the local level. When a section recognizes

The committed involvement and aggressive stance of all of mainstream dentistry, good people, and strong organizations is required if unethical behavior is to be controlled. To fail to intervene would have grave consequences. There is no room for complacency. The monitoring of unethical behavior is a moral imperative. We in dentistry have much at stake. We have an awesome responsibility to the public we serve.

The Ethics of Quackery and Fraud in Dentistry: A Position Paper

The Board of Regents of the
American College of Dentists

The American College of Dentists encourages ethical dental practice and actively opposes quackery, charlatanism, fraud, incompetence, and any other corruption of oral health care that places patients at unnecessary risk and threatens the integrity of the profession. The College also supports the advancement of the profession, especially continuous growth of the capacity of individual practitioners to provide effective, predictable outcomes deemed desirable by patients and the public.

While the vast majority of dental care is of high quality, a few individuals have abused the rights and privileges of the profession by misrepresenting the services they provide. Gross mistreatment of patients includes fraudulent billing, practicing without a license, and subjecting patients to dangerous and unproven treatments. Abridging trust can also take the form of gaps in competence and shading informed consent to favor procedures preferred by the practitioner. The College challenges the profession to study and understand the nature and damage of these unethical practices and to take appropriate action to eliminate them.

The Nature of Quackery and Fraud

Ethical dental practice meets all of the following standards. Where one or two of the standards are imperfectly met, the practice is ethically questionable. Quackery and fraud are marked by clear and regular failure to meet any of these standards.

1. **Informed consent:** patients make free choices from among alternatives that are explained impartially in language they understand.
2. **Benefit and risk:** net expected benefit to patients must outweigh anticipated risks.
3. **Competence:** practitioners have the knowledge and skill expected by patients and the public to be able to produce results that meet the standard of care and the expectations created by dentists.
4. **Professional integrity:** practitioners maintain the trust patients and society have placed in the profession.
5. **Reasonable scientific base:** practitioners should be able to give reasons for their actions that are acceptable to their peers.

The accompanying table shows the

characteristics, consequences, and some examples of ethical and questionable practice, and of quackery and fraud. Among the types of quackery and fraud, it is possible to identify distinct patterns of practice that damage patients and the profession, including:

1. **Incompetence:** practicing beyond one's capabilities.
2. **Using patients as a means rather than an end:** overtreatment to enhance one's reputation or income and undertreatment to increase profit.
3. **Unqualified practice:** practicing beyond one's license, including the practice of medicine on a dental license.
4. **Quackery:** risky and inappropriate treatment caused by practitioners who mislead patients because they mistakenly believe the treatment is appropriate.
5. **Charlatanism:** risky and inappropriate treatment caused by practitioners who intentionally mislead patients for personal benefit.
6. **Fraud:** purposeful and knowing misrepresentation, withholding of information, or selective reporting of information for personal gain.

Quackery and fraud can be the result of several motives, most commonly a desire (whether recognized or not) for status or income on the part of the dentist. Even when quacks and frauds believe they are acting in the best interests of their patients, they make the mistake of setting themselves up as the sole judge of their actions.

Ethical Dentists Must Respond

Although quacks and frauds are directly compromising patients, certain actions are required of ethical dentists. These responses are the result of dentistry's obligation to protect patients and to preserve the reputation of the profession. Because quacks and frauds damage both individual patient's and the public's trust in dentistry, specific actions are necessary on the part of individual dentists toward their patients and toward their colleagues, of the profession generally, and of the research community.

Responsibilities of Individual Dentists to Patients

1. Ethical dentists should practice at an ever advancing level of knowledge and skill but maintain an acceptable level of risk to benefit their patients.
2. Ethical dentists should be familiar with popular unsubstantiated practices in order to discuss these intelligently with patients.
3. Ethical dentists should provide the most positive available approaches, even when unfavorable prognoses are found, in order to discourage patients from seeking unsubstantiated care out of a sense of hopelessness.
4. Ethical dentists should seek to maintain the relationship of primary care provider, even if patients consult others of whom the dentist disapproves.

Responsibilities of Individual Dentists to Other Dentists

1. Ethical dentists have a responsibility to understand the approaches and capabilities of practitioners whom their patients are likely to see.

2. Ethical dentists have a responsibility to discuss their concerns with other caregivers if there is a suspicion about questionable practice, quackery, or fraud.
3. Ethical dentists should alert their colleagues to unconventional practice.

Responsibilities of the Profession

1. The profession has a responsibility to protect patients by taking actions against the licenses of practitioners whose habitual mode of practice damages patients.
2. The profession has a responsibility to encourage a broad understanding of risk, risk factors, and practices that expose patients to unnecessary risk.
3. The profession should promote means of sharing, within dentistry, information that promotes quality care.
4. The profession has a responsibility to inform the public regarding the benefits of good oral care, properly provided.

Categorizing Ethical Practice, Questionable Practice, and Quackery and Fraud

Ethical Practice

Consequences

Improving the patient's overall oral health and well-being through means understood and approved by the patient, other dentists, and society

Characteristics

Quality, patient-centered treatment within standard of care

Innovative aspects of practice that meet the five standards of ethical practice

Experimental practice (research) that meets Institutional Review Board standards

Examples

Almost all established dental practices, those that remain on the leading edge through professional procedures development, approved research programs

Questionable Practice

Placing the patient at risk for decreased overall oral health and well-being for the dentist's benefit

Performing procedures that the patient, other dentists, or society would not choose if well informed

Performing procedures at marginal levels of quality or failing to provide necessary treatment

Failure to take reasonable steps to remain current in knowledge and skill and awareness of prevailing standards of care

Overtreatment, undertreatment, poor quality care, lack of comprehensive care, failure to diagnose, misrepresentation of patient benefits, failure to refer when case exceeds skill

Quackery and Fraud

Damaging the patient's overall oral health and well-being, undermining the public's trust in dentistry as a profession, or breaking applicable laws

Withholding or distorting relevant information about treatment options, probable outcomes, or history of previous outcomes from patients, colleagues, or society for personal gain

Knowingly performing procedures that do not meet the standard of care

Practicing without a license, practicing medicine or other health profession on a dental license, billing for procedures not performed, gross and continuous substandard care, misrepresentation of one's qualifications, distorting the scientific basis of dentistry

Quackery and Fraud

5. The profession has a responsibility to inform policy makers about the standards of oral health care, the dangers of inappropriate care, and ways of distinguishing quality care.

Responsibilities of the Oral Health Care Research Community

1. Research should be conducted only in a manner widely understood as exposing patients to an acceptable level of risk.

2. Research should be reported in a manner that promotes free exchange of valid information, accurately communicated.

3. All professional journals should use the form and conventions appropriate for reporting research to ensure accuracy and completeness, and never attempt to create an impression of scientific quality for commercial purposes.

4. Practitioners should be taught to combine scientific evidence with systematic outcomes data from their own practices in order to form accurate estimates of the levels of risk their patients are exposed to in individual practices.

Quackery and Fraud: Understanding the Ethical Issues and Responding

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

Abstract

A small number of dentists abuse their patients and the public trust in the profession by practicing quackery or fraudulent or questionable dentistry. Such practitioners can be classified as incompetent, as treating their patients as a means to personal fulfillment, as operating beyond their legal qualifications, or as being quacks, charlatans, or frauds. Ethical practice requires all five of these characteristics: informed consent, high benefit to risk ratio, competence, professional integrity, and reasoned scientific basis for care. Quacks and frauds place their own interests and judgment above those of their patients and the profession. Ethical dentists have obligations to act to protect their patients and the profession in their relationships with patients and with colleagues, as a profession in dealing with the public, and as a research community.

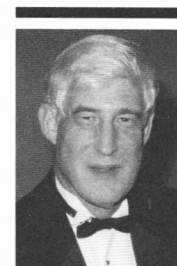
The American College of Dentists encourages ethical dental practice and actively opposes quackery, charlatanism, fraud, incompetence, and any other form of oral health care that places patients at risk and threatens the integrity of the profession. The College

also supports the advancement of the profession, especially continuous growth in the capacity of individual practitioners to provide effective, predictable outcomes deemed desirable by patients and the public.

In the minutes of the founding meeting of the College in 1920, John V. Conzett, President of the National Dental Association (forerunner of the ADA) observed "Fellowship (in the College) would be a stimulus to men who have graduated to do research work and bring things out for the advancement of the profession and the betterment of humanity." In the objectives of the College, published quarterly in the journal, the following phrases may be found: "In order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest numbers... Encourage qualified persons to consider a career in dentistry... Encourage graduate studies and continuing education... Encourage, stimulate, and promote research... Improve the public understanding and appreciation of oral health... Encourage the free exchange of ideas and experiences... Cooperate with other groups for the advancement of interprofessional relations in the interest

of the public... 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."

The vast majority of oral health care is of high quality, appropriately personalized to individual patients, of excellent value, free of unnecessary risk, and responsive to patients' long-term oral and general health and values. Individual practitioners work, through the American Dental Association, education institutions, the licensure community, politicians, industry, and public institutions to extend the benefits of oral health to all Americans. The result has been a dramatic improvement in oral health and related personal benefits that is dramatic in terms of public health gains, cost-benefit outcomes, and respect.



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Quackery and Fraud

Under this umbrella of improved oral health and public trust, there have been pockets of abuse. Some individuals have used the name of dentistry to advance their personal interests by placing patients at unacceptable risk. These practices range from billing for procedures that are not performed, and gross, habitual unnecessary treatment, to use of procedures that have no merit, practicing medicine on a dental license, and incompetence due to failure to keep up with advances in the profession. Less obvious ethical violations include giving selective informed consent, overtreatment, and viewing the patient as a means for advancing the dentist's income or reputation. All of these abuses have the characteristics of harming patients and damaging the profession generally. They violate the basic ethical standards of informed consent, placing the patients' interests first, being competent, respecting the integrity of the profession, and practice based on reasonable standards of evidence. These abuses take many forms, which can be named individually, but they will be labeled collectively in this report as quackery and fraud.

Understanding Quackery and Fraud

The table below provides an overview of the problem of quackery and fraud. Dental practice is described in three broad categories: ethical practice, questionable practice, and quackery and fraud. This is a schematic representation of the issue. It might not be possible to unambiguously place practices in the three categories. Practices may be mixed, with aspects that are questionable in an otherwise exemplary ethical office. Some outrageously fraudulent or misleading activities could be combined with ethical characteristics in order to create the appearance of legitimacy. The category of questionable practice is especially difficult to define because the standards at issue are often matters of interpretation and matters of degree.

Crossed with the three categories of ethical, questionable, and quackery or

fraudulent practice are dimensions that help characterize these types. First, quackery and fraud and questionable practice are distinguished from ethical practice based on their consequences to patients, the profession, and society. As practices deviate from the ethical norm, patients, the integrity of the profession, and social values are put at unacceptable risk. In quackery and fraud, actual damage occurs.

Under this umbrella of improved oral health and public trust, there have been pockets of abuse. Some individuals have used the name of dentistry to advance their personal interests by placing patients at unacceptable risk.

The characteristics section of the table is meant to define the most prominent features of practices that fall into the categories of ethical and questionable practice, and quackery and fraud. There are also examples of these types.

Types of Unethical Practice

The following typology is offered to provide better understanding of the range of unethical practice characteristics. While labels are commonly used to describe the practitioner as "incompetent" or a "fraud," for example, it should be borne in mind that it is the behavior that is incompetent or fraudulent. Thus mixed types, and marginal or ambiguous examples of undesirable practice, are possible. These types are not mutually exclusive—a particular act or pattern might represent several of these categories simultaneously. (When the terms quackery and fraud are used, it is understood that any of these types of unethical behavior are being considered.)

1. **Incompetence:** There are a very few dentists who are unable to provide care for their patients at an acceptable level of risk. Typically, they are unaware that they are not practicing at a competent level. The full concept of competency includes both the capacity to identify what care is needed and the professional values of

ensuring that this level of care is provided. There are three types of incompetence. Sometimes a dentist will attempt to perform procedures that are inappropriate for the patient or which the dentist is incapable of completing at predictably satisfactory levels of quality. The second type of incompetence is failure to recognize that a particular type of care is required or of continuing to offer only

familiar alternatives (of acceptable technical performance) when better choices are part of the standard of care. Finally, dentists may perform work at quality levels below the standard of care or offer treatment plans that contain unnecessary procedures or those whose value has been overstated. The first two types of incompetent practitioner distort the level of risk to which a patient is exposed; the third type exaggerates the benefit.

2. **Patient as a means rather than an end:** In most circumstances, the best interests of the patient, the dentist, the profession, and society are congruent. When discrepancies arise, the avowed ethical position of the profession is that the patients' interests are primary. In a word, the patients' oral health and well-being are the end of practice, and patients are not to be used as a means for dentists achieving personal goals. On occasion, practice patterns might sacrifice patients' concerns for dentists' income, for dentists' reputations as performing procedures that earn prestige among colleagues, or to avoid "hassle" and challenges to the dentist's authority (paternalism). Making the patient a means instead of an end is likely to lead to patterns of overtreatment or

undertreatment. It can also support unjustifiable experimentation with procedures that lack scientific foundation, or use of generally acceptable practices by practitioners who are not qualified by training or similar experiences to use them.

3. **Unqualified practice:** Practicing dentistry without a current and valid license is both unethical and illegal. Licensees may be disciplined for unethical and dangerous practice with regard to procedures requiring special certification that has not been obtained, as for example with conscious sedation, OSHA and other licensure renewal requirements in various states, or HIPPA compliance. Some dentists attempt to practice contrary to restrictions placed on their licenses. A major concern is practicing medicine or other health professions on a dental license.
4. **Quackery:** Quackery involves misleading patients about the needs for

care, its benefits, and its risks and, in the process, exposing them to unnecessary risk. In such cases society and the professional community do not endorse the choice of treatment being offered, and presumably, fully informed patients would not authorize such treatment. Quacks believe in the value of these services they offer and reject either the contrary evidence provided by society, science, or the professional community or they reject the authority of these communities to influence their behavior.

5. **Charlatanism:** Charlatans expose patients to unnecessary risk and unsubstantiated benefits, and they reject scientific evidence or external authority just as quacks do. The difference is that charlatans are aware that they are taking advantage of patients. Both quacks and charlatans make unsubstantiated claims and perform tricks that depend on apparent changes in symptoms that have

unknown or short-term relationships with underlying conditions. (The technical term for creating an illusion of treatment without materially improving the underlying condition is a fakir. In some communities, there are laws against fakiry.)

6. **Fraud:** Fraud is purposeful and knowing misrepresentation, withholding of information or material, selective reporting for personal gain. Fraud violates others' right to autonomy by attempting to get them to behave in ways they would not rationally choose to behave if they had accurate information. Examples of fraud include withholding or distorting information given to patients, misreporting work done (in order to get unwarranted insurance or other financial benefits or to comply with terms of a contract), and selective or distorted reporting of outcomes of treatment (in research or as justification for program support).

Categorizing Ethical Practice, Questionable Practice, and Quackery and Fraud

Ethical Practice	Questionable Practice	Quackery and Fraud
<p>Consequences Improving the patient's overall oral health and well-being through means understood and approved by the patient, other dentists, and society</p>	<p>Placing the patient at risk for decreased overall oral health and well-being for the dentist's benefit</p>	<p>Damaging the patient's overall oral health and well-being, undermining the public's trust in dentistry as a profession, or breaking applicable laws</p>
<p>Characteristics Quality, patient-centered treatment within standard of care Innovative aspects of practice that meet the five standards of ethical practice Experimental practice (research) that meets Institutional Review Board standards</p>	<p>Performing procedures that the patient, other dentists, or society would not choose if well informed Performing procedures at marginal levels of quality or failing to provide necessary treatment Failure to take reasonable steps to remain current in knowledge and skill and awareness of prevailing standards of care</p>	<p>Withholding or distorting relevant information about treatment options, probable outcomes, or history of previous outcomes from patients, colleagues, or society for personal gain Knowingly performing procedures that do not meet the standard of care</p>
<p>Examples Almost all established dental practices, those that remain on the leading edge through professional procedures development, approved research programs</p>	<p>Overtreatment, undertreatment, poor quality care, lack of comprehensive care, failure to diagnose, misrepresentation of patient benefits, failure to refer when case exceeds skill</p>	<p>Practicing without a license, practicing medicine or other health profession on a dental license, billing for procedures not performed, gross and continuous substandard care, misrepresentation of one's qualifications, distorting the scientific basis of dentistry</p>

Society has a right to expect that oral health care will evolve to provide continuously improved outcomes, including better function, improved esthetics, longer service life, reduced cost, greater accessibility, less invasive intervention, increasing numbers of choices, greater predictability, and prevention of unwanted future events. As dentistry continuously experiments with care that provides such enhanced benefits and as individual practitioners update their profiles of services, some level of risk is inescapable. It is expected that this risk will be managed for the benefit of patients and society.

Standards for Ethical Practice

It is possible to better understand the nature of quackery and fraud in dental practice by contrasting them with ethical practice on five critical dimensions. All five of the following standards must be met for practice to be regarded as ethical. Where one or two of the standards are imperfectly met, the practice is ethically questionable. Quackery and fraud are marked by clear and regular failure to meet any of these standards.

Understanding these dimensions helps prepare for those actions that should be taken by ethical practitioners in the face of quackery and fraud.

1. **Informed consent:** patients make free choices from among alternatives that are explained impartially in language they understand.

The patient must give permission for his or her oral health care. Because patients do not possess the technical knowledge required to make choices in their best interests, health care providers are required to educate them about available alternatives and their likely benefits, costs, and undesirable consequences.

When informed consent is technical, general, abbreviated, or slanted toward procedures preferred by dentists there is danger of questionably ethical practice. When it is absent or intentionally distorted to gain permission that a fully informed patient would not give, or when it suggests that the patient cooperate in an illegal act, the dentist is

engaging in quackery or fraud.

2. **Benefit and risk:** net expected benefit to patients must outweigh anticipated risks.

Expected benefit and expected risk are determined by considering both the value (to the patient) of the outcomes and the likelihood of the outcomes. This is part of informed consent. Typically, dentistry involves benefits of appreciable value that can be anticipated with great confidence compared to risks that are extremely unlikely. Patients have difficulty making decisions about improbable events or outcomes that are momentous or poorly defined. In presenting prognoses and

tioner must know what the standard of care is, must be appropriately trained and equipped to practice to this level, and must refrain from practicing beyond his or her level while assuring, through appropriate consultation and referral, that the patient receives appropriate care. Because dentistry is a dynamic profession, the four obligations under the heading of competence include an obligation to engage in professional development to maintain currency.

This standard goes beyond merely meeting the standard of care. Patients and society have a right to expect that practitioners are competent to consis-

Quackery involves misleading patients about the needs for care, its benefits, and its risks and, in the process, exposing them to unnecessary risk.

treatment alternatives involving life-threatening matters, care must be taken to promote patients' accurate understanding of expected outcomes.

It is quackery to mislead patients regarding potential outcomes, especially by exaggerating the danger of certain events or their likelihood or by minimizing the importance or probability of available alternatives. It is questionable practice to reduce these patient calculations to policy for the convenience of the dentist or to attempt to make the patients' calculations of expected benefits and risks match the dentists'.

3. **Competence:** practitioners have the knowledge and skill expected by patients and the public to be able to produce results that meet the standard of care and the expectations created by the dentists.

The standard of care is defined locally in terms of what a reasonable person might expect as the outcomes of treatment. Untoward outcomes may not represent a failure of standard of care if the practitioner exercised appropriate and reasonable procedures. There are four obligations associated with competency regarding the standard of care. The prac-

tently meet the standard of care. If there are doubts on this score, the practice is ethically questionable. If the practice regularly fails to meet the standard of care (because of incompetence or disregard for the generally prevailing standard), this is quackery or fraud.

4. **Professional integrity:** practitioners maintain the trust patients and society have placed in the profession.

Patients and the public place trust in dentists based on their knowledge, skill, and concern for the good of the patient. This trust is part of the therapeutic alliance and contributes to access, conformance with professional suggestions, healing, nature and frequency of care seeking, and other results that are beneficial to the patient. This trust is also "a good" that is shared among all recognized as members of the profession.

Quacks and frauds take advantage of the public's trust in the profession for their own personal gain. Even when individual patients mistakenly believe that they are receiving acceptable care from quacks or frauds, the public at large loses respect for the dental profession. To the extent that a practitioner holds himself or herself out as being

entitled to the benefits of the trust given the profession, they are liable for any damage caused by abuse of that trust.

Quacks and frauds represent themselves as dentists entitled to the trust the public places in all members of the profession while failing to justify that trust by their actions and damaging the reputations of dentistry.

and procedures does not enjoy the same status as established practices with regard to evidence, known benefits, or standard of care. In recognition of this fact, institutional review boards (IRBs) are established, with lay and professional experts to ensure appropriate protections. This includes elaborate informed consent, assessment of research design and analy-

might manifest itself in various forms. For example, an ethical dentist who wants patients to receive the best care in implants may take courses to develop skills in this area or may refer patients to those who specialize in this discipline.

A superficial criticism of quackery and fraud is that those who perpetrate them fail to place the patients' interests first. Quacks in particular would challenge this criticism. "I am offering my patients hope where organized dentistry offers none," they might say, or alternatively, "other dentists think they know what is best for my patients, but I am certain they are mistaken. My patients tell me so."

The view developed in this paper is that profession of motives is no way to decide what is ethical dental care. The issue turns on knowledge rather than sincerity. Quacks and frauds are mistaken in their belief that they know better than others what is in their patients' best interest. They disregard the collective wisdom of society, science, and the profession, and in that they are wrong—regardless of their professed motives.

An approach that avoids the pitfalls of judging others' motives is the "act as if test." In matters of conflict of interest the standard that applies is to act so that

Quacks and frauds are mistaken in their belief that they know better than others what is in their patients' best interest. They disregard the collective wisdom of society, science, and the profession, and in that they are wrong—regardless of their professed motives.

5. **Reasonable scientific base:** practitioners should be able to give reasons for their actions that are acceptable to their peers.

It is not possible to find a rigorous research scientific rationale for everything dentists do. Nevertheless, dentists should not practice contrary to scientific evidence. There are also standards for reasonable grounding of practice in evidence. Procedures must be safe. This means that the side effects should be known, disclosed, and minimal relative to the anticipated benefits. Procedures should also be efficacious; they should predictably produce the benefits expected of them. Efficacy is normally established in one or more of three ways: results of rigorous research studies, reasonable similarity between new procedures (or new practitioners using established procedures) and those already proven effective, and those generally regarded as effective based on a history or extensive, general use. These are exactly the standards currently used by the Food and Drug Administration in its regulation of devices and therapies. Cosmetic claims and the use of naturally occurring elements used as supplements are not regulated for efficacy, but they are regulated for safety.

By definition, experimental research performed by schools, research centers, and industry to develop new technologies

and balancing of risk and benefit.

Procedures that are not customary carry the added burden of needing to provide proof based on evidence collected and reported in ways that safeguard patients and ensure peer acceptance of publicly reported results. Quackery and fraud cannot be justified based on private evidence, and exposing patients to substantial risk without the protections afforded by IRB practices is by definition unethical. A common form of questionable practice is to use evidence-

Where the quack or fraud deviates from the ethical path is in claiming to be the sole judge of their motives.

based technologies and procedures in situations or for uses other than those in which they have been shown to be safe and effective.

Motives

Risk always accompanies the discussion of motives, especially other's motives. A single action can be undertaken for various motives. The treatment chosen for a particular patient might simultaneously provide the best overall long-term benefit to the patient and the greatest net profit to the dentist. A single motive

no appearance of a conflict is created. The same logic applies with regard to ethical dentistry. The test should be to practice in such a fashion that no appearance of quackery or fraud is created. Unethical dentists leave themselves open to the criticism that they are acting in such a fashion that reasonable people could draw the conclusion that they place their own income, reputation, or other personal gain above patients' welfare. Where the quack or fraud deviates from the ethical path is in claiming to be the sole judge of their motives.

Addressing Quackery and Fraud

Risk in oral health care must be acceptable to patients, society, and the dental profession. All three groups are affected by the outcomes of dental treatment, and that is sufficient grounds for their concern. Incompetent practitioners damage patients and the public trust in the profession far too frequently to be allowed to continue practicing. They are

supersede individual agreements between dentists and patients is recognized in law and is a fundamental responsibility of state dental boards.

The American Dental Association has recently defined unconventional dental care as that which lacks scientific evidence. While it is important to remember that dentistry is based on a tradition, over a century old, of combining the best scientific data and practice

The right of professions to establish standards in the best interests of patients that supersede individual agreements between dentists and patients is recognized in law and is a fundamental responsibility of state dental boards.

liable to civil and even criminal suits as well as sanctions against their licenses by licensing authorities. Quacks and charlatans are open to similar sanctions, although these are much less common. The reason can be found in the fact that certain classes of patients agree to the claims of quacks and charlatans. The fact of informed consent between patient and provider is not sufficient grounds for exposing patients to risk. In some cases, society has a public interest in private transactions. Helmet and seat belt laws, prohibitions against assisted suicide, and required inoculations and screenings are a few such examples.

Even when society at large remains silent on some details of dental practice (due typically to the technical complexity of such issues), the profession has a legitimate interest in distinguishing between those practices that involve acceptable risk (if approved by individual patients and dentists) from those that do not. This right flows from the fact that anyone holding himself or herself out as providing dental services automatically makes use of the collective trust the profession enjoys, including patients' understandable deference to dentists and the limit that places on patient autonomy. The right of professions to establish standards in the best interests of patients that

experience, an evidence-based rule is too blunt for distinguishing appropriate from inappropriate oral health care. For example, experimental treatments conducted by researchers that are critical for advancing the profession are not evidence-based. Cutting the other direction, no practitioner should be allowed to defend the unacceptable risk of exposing a patient to materials or procedures with which the dentist is unfamiliar by citing evidence that these practices are supported in the literature. Science is a necessary but insufficient condition for distinguishing between acceptable and unacceptable practice.

Evidence is not self-warranting. It is sound depending on method, context, and purpose. Debates over fluoride, amalgam, systemic correlates of oral conditions, etc. are often fueled by conflicting data, but seldom decided by data. Controversies over the status of data are controversies over standards of practice in research, in exactly the same sense that controversies over dental practice are political differences. Full disclosure and acceptable risk for researcher, subject, and society are the minimal criteria. These fundamentals are embedded in the logic of institutional review boards and peer review for scientific publication.

While patient autonomy and informed consent, professional competence, and scientific evidence are critical components in distinguishing between acceptable and unacceptable oral health care practice, the determination is ultimately an ethical one. The principle of discursive ethics that those who are affected by decisions should have a voice in the decisions means that the profession generally and society as a whole must also decide where the boundaries of acceptable practice lie.

Responsibilities of Individual Dentists to Patients

1. Ethical dentists should practice at an ever advancing but acceptable level of risk and benefit to their patients. The care provided should meet the expectations of the individual dentist, his or her patients, society at large, and the dental profession. Practice must be avoided that does not meet standard of care and for which the dentist cannot give reasonable assurance of favorable outcomes based on evidence from science and the individual practice. Additionally, practice must be undertaken in a systematic fashion and records kept of outcomes and unusual circumstances. Patients cannot be exposed to increase risk for the financial and personal benefit of the dentist. If there is uncertainty whether the four criteria apply, the dentist's uncertainties should be discussed with colleagues and with patients in order to obtain their informed consent. If the practitioner would prefer not to disclose all he or she knows about the procedure, it should not be performed.

The language appropriate to this responsibility might be, "Now that I have explained this approach, is it acceptable to you?"

2. Ethical dentists should be familiar with popular unsubstantiated practices in order to discuss these intelligently with patients. In cases where patients inquire about approaches that the ethical dentist would not perform, the dentist should be in a position to understand the most

common benefits claimed for the procedures, those circumstances in which it has been attempted, the underlying mechanisms involved (or claimed), and the pattern of outcomes. The role of the dentist is to provide accurate information, not to determine the patient's action.

The language appropriate to this responsibility might be, "It appears that you are looking for further information on which to base your choice. Would you like me to tell you what I know about this approach?"

- Ethical dentists should provide positive available approaches, even when unfavorable prognoses are found. Quackery and charlatanism thrive in environments of despair. Often the last professional contact a patient experiences before consulting a quack or charlatan is an ethical dentist who told the patient that their situation was very unfavorable and that available treatments were unlikely to be effective. While such advice from ethical dentists is honest in the strictest sense, it fails to provide the supportive relationship expected of professional care. Dentists should be aware of ethical research protocols for high-risk conditions and of centers where such cases are treated. Referrals should be made to experts in high-risk care wherever they are believed to have a more realistic overall outcome than referral to quacks or charlatans.

The language appropriate to this responsibility might be, "Your case is special and I am not the most qualified person to help you. I know of several centers or professionals who specialize in cases such as yours and I would like to help you to consult one of the following ..."

- The relationship between dentists and their patients takes precedent over individual treatment choices. The ethical dentist, as the primary oral health care provider, has a responsibility to avoid damaging his or her opportunity to advise patients generally and to monitor the overall

and long-term oral health of the patient. Even when a patient considers or selects alternatives that the practitioner does not approve of, the primary care provider relationship should be maintained to the maximum extent possible.

The language appropriate to this responsibility might be, "I believe you understand why I cannot support the type of treatment you are considering for this specific problem. My primary concern is for your overall oral health, and I hope you will trust me to continue to evaluate and advise you regarding your total dental health."

about your approach because I lack all the relevant information. I feel I have an obligation to my patients to provide accurate counsel and I would like to understand your views."

- Ethical dentists have a responsibility to discuss their concerns with practitioners they suspect as being incompetent, quacks, or charlatans. It is easy, but not morally principled to criticize or spread innuendo about another without first confronting him or her. Righteousness is not a substitute for ethical action. The intent of the communication with a colleague expected of exposing patients to unacceptable risk is not

Ethical dentists should be familiar with popular unsubstantiated practices in order to discuss these intelligently with patients.

Responsibilities of Individual Dentists to Other Dentists

- Ethical dentists have a responsibility to understand the approaches and capabilities of practitioners whom their patients are likely to see. The same diligence that a general practitioner would exercise with regard to specialists in the community should be extended to practitioners whose approach is questionable. It is difficult to accurately advise patients without understanding what others are doing. This may be difficult because unconventional practitioners are reluctant to share information or where ethical practitioners are perceived as being judgmental. It may be necessary to learn about alternative practices indirectly, through patients, literature, or other sources. It is important to refrain from judging what is not understood. Although it is always appropriate to report, when appropriate, that information is not available.

The language appropriate to this responsibility might be, "I do not want to say anything disparaging

judgmental, it is educational. The effective message is that the ethical dentist regards the practices of the possible unethical dentist as outside the bounds of accepted practice. In borderline cases, this may be sufficient to open a discussion that leads to better understanding or to backing away from questionable practice.

The language appropriate to this responsibility might be, "I am having difficulty reconciling what I understand about your approach with what is the accepted standard of care in the profession. Let's talk about whether this is in the best interests of both patients and the profession."

- Ethical dentists should alert their colleagues to unconventional practice. Because it is often difficult to obtain information about such practices, dentists should share what they are able to determine. The focus should be on the practices, not the practitioners; and the intent is to discover accurate information, not form judgments. (This will be discussed in the next section.)

The language appropriate to this

responsibility might be, "I am concerned with what I have learned about practitioner X or practice X. As nearly as I can determine, from the following sources, this is the case. Leaving supposition and judgment aside, is there any factual information you have?"

ate risk and what is appropriate individual flexibility.

Where such a system is used in education, business, law, and other professions, it goes by the names of a profile or accreditation system. It begins with a statement of minimum expected standards, normally stated

practices are effective depends on a rich exchange of experiences. Journals, meetings, web sites, conferences, etc. should be expanded in number and variety of format. It is necessary that standards for inclusion as evidence be established and that they be listed in the various media. It is also important that information sharing have as its primary goal the strengthening of the profession, and that the commercial interests of the sponsoring organization or the personal interests of presenters be subordinated at all times to information sharing.

Ethical dentists have a responsibility to discuss their concerns with practitioners they suspect as being incompetent, quacks, or charlatans.

Responsibilities of the Profession

1. The profession has a responsibility to take action against the licenses of practitioners whose habitual mode of practice damages patients. State dental boards are legally bound to do this, in cooperation with other agencies and organizations. The actions of boards should be as transparent and as widely publicized as is consistent with legal rights of practitioners. Boards are involved with matters of fraud, illegal practice, substance and patient abuse, and other failings in addition to incompetence, quackery, and charlatanism. The focus of boards should be prioritized based on those classes of individuals who cause the greatest damage to the public.
2. The profession has a responsibility to protect patients from unacceptable risk by encouraging understanding of risk, risk factors, and questionable practices patterns. Standards of care defined by the legal profession, guidelines developed by professional groups, protocols, and evidence-based rules have a place in promoting an understanding of acceptable care. But even taken together, they fall short of a standard that is sufficiently unambiguous, reflective of the particular nature of individual practices, and responsive to emerging trends. What is required is a system that encourages the collective evolution of the profession while encouraging both recognition of what is appropri-

in terms of outcomes, by a group that represents the profession. Evidence is requested periodically from practitioners that the standards are being met—but providing the evidence and the nature of the evidence provided is the responsibility of the practitioner, not the profession. (There are multiple ways of achieving excellence and many ways of demonstrating that.) Failure to provide information is a prima facie admission that practices are substandard.

The third element is identification of a body that has expertise and authority to judge the adequacy of the evidence. Typically, this is a group of one's peers in the professional context. Sometimes, the portfolio process includes attempts to remedi-

4. The profession has a responsibility to inform the public of the benefits of good oral care, properly provided. The intent should be to create realistic expectations of what is possible and what the standards are for choosing alternative therapies. The profession should discourage unrealistic claims that dentists make to each other, that dentists make to patients, and that the profession makes to the public. In particular, it is undesirable to exaggerate the benefits of unproven approaches.
5. The profession has a responsibility to inform policy makers regarding oral health care. Relationships should be established and maintained with legislators, their staffs, and individuals responsible for executing policy based

It is inherently unethical to mislead dentists and the public into believing that a level of scientific certainty has been achieved based primarily on the manner in which the results are presented.

ate inadequate performance prior to excluding the practitioner from the community. Effective portfolio systems have time schedules, protocols, and due process.

3. The profession should share within dentistry information that protects patients from unacceptable risk. A strong collective awareness of which

on a common interest in promoting the oral health of the public. Care should be taken not to confuse advancing the interests of the profession with advancing the interests of the public. This can best be achieved by providing policy makers with information and with assistance in interpreting scientific information

that may not be readily understood by lay individuals.

Responsibilities of the Oral Health Care Research Community

1. Research should be conducted in a manner that exposes subjects to an acceptable level of risk. Research conducted by organizations that receive federal funding is subject to prior evaluation and approval by institutional review boards. Such groups, composed of experts in science, research design, and community interests and trained in common ethical and scientific standards must approve the conduct of all research conducted in these organizations, whether federally funded or not. Informed consent is emphasized as is the adequacy of experimental design (an experiment that is poorly designed by definition exposes both subjects and the professional community to unacceptable risk). The use of institutional review boards should become universal practice, regardless of funding sources. At a minimum, peer review prior to research should be combined with peer review following research as essential credentials to evidence on which practice is based.
2. Research should be reported in ways that emphasize demonstrated scientific conclusions. Standards for reporting of research findings should be established that address both the internal and the external validity of conclusions. The research and journalistic communities have made significant progress in using sound research designs and statistical analysis (internal validity). Standards have not been advanced as rapidly in providing data on generalizability or limitations on generalizability to contexts that resemble but are not the same as research environments. The value of science remains compromised when it is applied selectively, misapplied, or overapplied because the research was not designed to apply to general circumstances, the circumstances were not fully described, or practitioners have not been taught to understand the limitations on drawing conclusions from science.
3. Dental journalism should avoid using the style and channels of communicating research to promote commercial interests. It is inherently unethical to mislead dentists and the public into believing that a level of scientific certainty has been achieved based primarily on the manner in which the results are presented.
4. Practitioners should be taught to combine scientific evidence with systematic outcomes data from their own practices in order to form accurate estimates of the levels of risk their patients are exposed to in indi-

vidual practices. While it is true that practices differ from each other in patient profiles and expectations, dentists' skills, and other unique factors, these factors should not be regarded as being outside the realm of systematic professional observation and rational use. Dentists should be permitted flexibility in their practices, but this cannot absolve the responsibility to rationally defend, using evidence acceptable to their peers, their actions based on practice outcome data. Failure in this regard creates suspicion of incompetence, quackery, charlatanism, or worse.

Reading

- American College of Dentists. *Ethics Handbook for Dentists*. (See especially sections on competence, professionalism, and management of ethical issues.)
- American Dental Association. *Principles of Ethics and Code of Professional Conduct*. (All Fellows of the American College of Dentists subscribe to the ADA code.)
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- www.quackwatch.com

The Patient Doesn't Get It: A Case

Lola Giusti, DDS

This case was prepared especially to accompany the position paper on "The Ethics of Quackery and Fraud in Dentistry" developed by the American College of Dentists. It is based on the amalgamation and elaboration of several actual incidents, but as a whole does not describe any particular patient or dentist.

Mrs. P recently remarried at age 50 and decided to "fix up her mouth." She had been a victim of domestic violence in her first marriage. Attendant to her desire for an improved appearance, she consulted several general dentists, two of whom recommended orthodontic intervention to correct her Class II Division II malocclusion prior to performing cosmetic procedures. Two orthodontists recommended orthognathic surgery in conjunction with full-mouth banding for a period of 36 months. A third orthodontist, Dr. O, told the patient that she could have a "Julia Roberts smile" without surgery in two years of treatment with bands and perhaps a removable appliance. Mrs. P was extremely apprehensive about the surgical procedure. She was impressed by Dr. O's modern facility and by the fact that several of his very attractive staff members were sporting orthodontic braces and wires. The general dentists had not made the referral to this particular office; the patient had self-referred based upon a recommendation of a member of her tennis club.

Upon completion of the orthodontic

treatment, orthodontist referred Mrs. P to a colleague of his in the same neighborhood. She was assured that Dr. E was very "up to the minute" in his esthetic procedures. The woman was displeased about the dark triangles at the gumline between her teeth, which she felt were aging. The recession of the tissues around her lower anteriors was of even

E, to pay for restorative treatment to remedy these problems because her husband was supportive and she liked the orthodontist personally and was not upset with him.

Mrs. P also asked Dr. E what could be done about her "lip problem." Upon further exploration, it became apparent that in rapid speech her lower lip "got

Without discussing the etiology of the problem, Dr. E suggested that using collagen injections to plump out the lips would be appropriate. He suggested that this could be done by any of several local dermatologists or "much more reasonably" in Mexico.

greater concern to her. She wanted the spaces between her maxillary incisors "filled" and the roots "covered" with "bondings."

The Dr. E may have felt pressured by the patient's expression of disappointment in the esthetic outcome of the orthodontics. Neither of the effects of the treatment (the dark triangles or the recession) had been explained to her before treatment. She had assumed that because she paid over \$7000 for treatment in a beautiful facility with a practitioner who "understood her concerns" that her finished case would be as attractive as the dental assistants' working in that office. She was willing, she told Dr.

caught" underneath her maxillary central incisors. Discussing the etiology of the problem, Dr. E suggested that using collagen injections to plump out the lips would be appropriate. He suggested that this could be done by any of several local



Dr. Giusti practiced for twenty years, most recently in Marin County north of San Francisco. She is a faculty member at the University of the Pacific School of Dentistry.

dermatologists or "much more reasonably" in Mexico.

Dr. E filled the dark triangles with large composites at the interproximal cervical levels and the patient was pleased with the more youthful effect this gave her maxillary incisors. He placed large cervical Class V composites on the lower incisors and "wrapped" them into the embrasures to eliminate the root exposure that caused the patient distress. She began collagen injections, eventually transferring from a local physician to a clinic in Tijuana because of the cost and the need for repeating the treatment every three months.

uation of her options. Additionally he recommended that the patient see a periodontist immediately for management of periodontal problems. The patient was upset to learn that she had periodontal disease, but followed up on all the referrals in a timely manner. The general dentist phoned all the specialists involved, asking them to call back upon evaluation of this patient. He was aware of his responsibility to inform the patient of his findings. Unsure of what might be done to improve the patient's situation, he relied upon the awaited consultations with the specialists to guide him. Having worked with them for over twen-

G that the previous general dentist was "a great guy and a good practitioner," and that it was not his job to deal with restorative care. His opinion was that it would be best to move forward with three-month recalls, although surgery might be needed down the line if things did not improve.

Dr. G was disappointed by what he regarded as the consulting specialists' attempts to distance themselves from the case. He decided to ask Dr. O, the treating orthodontist, for a few minutes of his time to discuss the case, bringing the study casts and articulator to the meeting. The orthodontist produced pre-operative casts and demonstrated to the generalist the improvement in esthetics following "unraveling" the crowded and retroclined incisors. He was unaware that the patient had undergone collagen injections to help with the "lip problem," and did not comment on it. He felt that long-term retainer therapy would prevent relapse of the case and that three-month recalls would be appropriate. Dr. O confided to the general dentist that adult cases were often difficult for him, and that he was considering limiting his practice to children as a result of this case.

The Dr. G left this last meeting feeling that he had done his duty by the patient and told her at the follow-up consultation of his desire to help her maintain her teeth by examining her annually for caries in conjunction with periodontal recall. He never mentioned the option of peer review, nor did he refer Mrs. P to the state board of dental examiners. He did not give her the name of the local attorney experienced in malpractice litigation. She seemed happy with his approach and continued with the collagen injections every four months.

She had assumed that because she paid over \$7000 for treatment in a beautiful facility with a practitioner who "understood her concerns" that her finished case would be as attractive as the dental assistants' working in that office

A year after completing the case, Dr. E moved to another community and the patient self-referred to another general dentist near her home.

The new dentist, Dr. G, was dismayed by what appeared to be gross violations of the standard of care. There were five- and six-millimeter pockets throughout the mouth, many of them located around heavy ledges of interproximal composite in the anterior segments. The impingement of the incisors upon the neutral zone appeared to be the source of the "lip problem."

Dr. G mounted study casts and looked at the case several times a day before recalling the patient for consultation. He referred the patient to the two best orthodontists in the county for eval-

ty years, he was hopeful that they would offer conscientious support.

One orthodontist was forthcoming in his phone consultation about the poor outcome of the treatment. He had not informed the patient that her care was substandard; rather, he offered her orthognathic surgical remediation, which she declined. He told Dr. G "confidentially" that he was sick and tired of seeing the treating orthodontist "get away" with this type of treatment. But years of experience led him to believe there was little that could be done. The second orthodontist stonewalled and would not discuss Mrs. P. The periodontist saw the overhanging composites and knew that they detracted from the gingival health of the patient. He told Dr.

Our Legacy: Trust

D. Gregory Chadwick, DDS, MS, FACD

As practitioners we enjoy a legacy passed down through generations of dentists giving us the long-standing values and principles of our profession including: our code of ethics, our belief that treatment decisions are based on sound science, the doctor-patient relationship, a genuine concern for our patients, and most important of all, the trust of our patients.

would have affected the outcome of Mrs. P's treatment, her view of her treatment, and her view of our profession.

When we first met Mrs. P, she had "consulted several general dentists" but she had not established a proper relationship with a general dentist. This is a difficult but important period of time in the doctor-patient relationship because it requires that the dentist and the patient together evaluate the present

she understood, she could have chosen other treatment options or even another orthodontist. Her expectations might have been more in line with the final orthodontic result and she would have realized that she probably would not have a "Julia Roberts smile." She could have avoided the surprise and disappointment of the "dark triangles," the gum recession, the lip problem, and her finished case not being as attractive as the dental assistants working in Dr. O's office. Mrs. P's unrealistic expectations, precipitated by her dentists, can serve only to undermine her trust in our profession.

The unfortunate result of Mrs. P's haphazard care is the lack of a comprehensive resolution to her situation. Dr. G, "dismayed" by what he observed, identified the patient's periodontal problem and cause of her lip problem and realized that he was "unsure of what might be done to improve the patient's situation." He depended on consultations from specialists he trusted to guide him, but they elected not to get

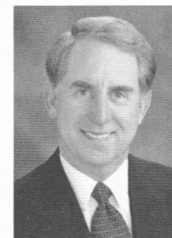
Although the individual practitioner is the linchpin, upholding our ethics and principles requires all of us to work together as a united profession.

Our responsibility is to nurture those values, not take them for granted, and to pass that legacy on to future generations. It is important not only to be aware of our ethical values, but also to practice and understand them. We encounter ethical decisions every day and although no two are exactly the same, we increase our understanding through experience, study, and discussion with our colleagues.

The position paper on "The Ethics of Quackery and Fraud in Dentistry" and the accompanying case study challenge us to further our understanding. The case offers far too many elements to discuss all of them within the scope of these brief comments. However, some key areas, had they been handled differently,

condition plus what the patient is seeking and then determine the necessary course of treatment and follow-up. It is a two-way street. If either party fails to follow through and communicate with the other, then the relationship breaks down. In this case it appears that none of the parties followed through.

Mrs. P would have been well-served had she established a solid relationship with one of the general dentists as her primary dentist, who understood her entire condition and was able to explain and monitor her treatment and with the help of the specialists, guide her course of treatment. With her general dentist and her specialists working together and communicating treatment options and expected treatment outcomes in terms



Dr. Chadwick practices in Charlotte, North Carolina. He is a Past President of the American Dental Association.

involved or to delay definitive treatment. To Dr. G's credit he confronted Dr. O with his concerns about Mrs. P's treatment and although Dr. O seemed to feel his treatment was satisfactory, he indicated that he might not attempt similar cases in the future—a small victory. Unfortunately, in the end, Dr. G also gave up on seeking a comprehensive solution for his patient and elected to “maintain” her annually. If the dentists had a genuine concern for Mrs. P and had been willing to honestly explain her true condition to her along with their rationale for their recommendations, she

might be well on her way to a comprehensive resolution to her situation.

This case study offers ample opportunities to analyze the actions of several dentists and a patient and to see how decisions that could seem minor when considered individually, compound to the point that a patient is ill served and professional integrity is jeopardized.

It behooves us to think, both individually and collectively, about ethics and to engage in the understanding of ethical issues. An important concept that comes into play is that the challenges facing the profession, be they ethical issues or oth-

erwise, are more than any individual dentist, no matter how dedicated, can possibly address. Although the individual practitioner is the linchpin, upholding our ethics and principles requires all of us to work together as a united profession. This premise is at the heart of organized dentistry and highlights the significance of working together in organizations such as the American College of Dentists. If this happens, we will earn the respect of the public and the trust of our patients and in the end we will be able to leave a legacy for the next generation of dentists.

There Are Several Sides to the Story

Robert M. Anderton, DDS, JD, LLM, FACD

The hypothetical case of Mrs. P. relates to all of the themes of the position paper on "The Ethics of Quackery and Fraud in Dentistry". My impressions and response are as follows.

First, my comments will be skewed somewhat toward defense, and may generate more questions than answers. Because of my legal experience working

what they appear to be.

Standard of care is not established by the ADA, the ACD, the AGD, or any other organization, but by experts testifying under oath in court. Fifteen years ago, the ADA considered attempting to establish standards and eventually wrote parameters, or guidelines, instead—rightly so.

This would appear to shift significant responsibility for outcomes to the patient, provided they are adequately informed.

in defense of dentists in malpractice and disciplinary cases, I may have a somewhat broader perspective of issues involving patient participation in treatment, standards of care, informed consent, and justifiable criticism. I rarely see a case that does not involve the criticism of one dentist against the work of another dentist. The vast majority of the criticisms are unjustified, and made with disparaging remarks in violation of the *Principles of Ethics and Code of Professional Conduct*—Section 4.C. and 4.C.1.

My experience has taught me that in every case there are two sides to the story. It is imperative that one hear both sides of an issue before attempting to draw conclusions. Things are not always

Most jurisdictions define a standard of care as "the care that would be provided by a reasonable and prudent dentist acting under the same or similar circumstances." Most often overlooked is the last phrase "acting under the same or similar circumstances." Once all of the circumstances are known, opinions often change.

Section 1 and 1.A. of the *Principles of Ethics and Code of Professional Conduct* establish dentists' responsibility to inform the patient and to allow for the patient to be involved in his or her treatment decisions. Most dental boards and dental practice regulating agencies are now requiring that dentists ensure that patients are involved in their treatment. This would appear to shift significant

responsibility for outcomes to the patient, provided they are adequately informed.

Applying these considerations to "The Patient Doesn't Get It," it appears that the patient's problems began with her decision to accept treatment from the orthodontist, Dr. O. Was Dr. O's statement about a "Julia Roberts smile" a guarantee?—Probably not. She did not get the result she expected, but she has to accept some responsibility because she selected the "easy way out." She had already been told by two other orthodontists (and then one later) that she should have orthognathic surgery. We do not know the adequacy of her informed consent, but we do know that she was presented with alternatives.

Following the orthodontic treatment, she elected restorative treatment and collagen injections which appeared to solve her esthetic concerns, but created periodontal problems in the process.



Dr. Anderton practices in Carrollton, Texas. He is a Past President of the American Dental Association.

Considering that we again do not know the adequacy of her informed consent or if she was presented with alternatives, she chose restorations and visits to Tijuana in the interest of cost.

Although she ultimately seems to have gotten into the hands of a competent, concerned dentist (who has not gotten much if any assistance from the practicing community), she has chosen to continue on her course of favoring esthetics and lower cost, but now with frequent recalls. She does not appear to be unhappy with any of her dentists, and according to the documentation presented, is not complaining. (Maybe she still doesn't get it!!)

Of interest there are the questions of whether or not she should have been referred to peer review. Maybe so, but where does she start and against whom does she complain? Dr. G could initiate peer review, but he has to answer the same questions and get her involvement as well.

Should she be given the name of the local attorney experienced in malpractice litigation? This is a possibility, but she doesn't appear to be complaining to that degree, and if she is outside California or a couple of other states it is questionable as to whether or not she has suffered enough damages to attract the

interest of a malpractice attorney who generally works on contingency fee arrangements. (She certainly appears to have damages, but dental cases in general are very small when compared to medical cases.) Is this where we, as a profession want to go with out ethical issues?

Should she be referred to the state board of dental examiners? Most constituent societies provide for referral to the state board of dental examiners in cases where the peer review process does not reach resolution. She can certainly go directly to the board, and all of these issues will be investigated. The dentists and the circumstances will be investigated and the dentists will be punished if found in violation of the laws governing the practice of dentistry.

This is a case that, by and large, could have been successfully considered and possibly resolved by peer review. The patient, however, would have had to participate.

In conclusion, the profession, under most circumstances, as in this case, could effectively deal with ethical and standard of care issues and many other issues currently administered by state boards of dental examiners. This would require that the profession be truly self-governing and policing. Many advan-

tages would be gained—not the least of which would be to allow the state boards to spend more time on licensure and more serious violations of the dental practice laws (drugs and illegal practice, to name only two).

While this case contains implications of quackery, charlatanism, and questionable dentistry, when all of the circumstances are known and considered, will the implications stick? In my experience, there are many accusations and implications, but few have merit.

The profession of dentistry has a remarkable record of the highest ethical standards. We enjoy the highest public esteem. The vast majority of dentists provide the very best quality of care for their patients, and are most concerned for the image of the profession as a whole. We are a profession of perfectionists, but perfection is rarely achievable; and often our technology exceeds the ability of our patients to pay.

So what degree of imperfection are we willing to accept—especially in light of the patients accepting more and more responsibility for their own treatment? Do we want to go beyond the *reasonable and prudent* standard? If so, who will set the standards and how high do we raise the bar?

When the Patient Doesn't Get It: "Do the Right Thing"

David A. Whiston, DDS, FACD

Ethics can be taught. Ethical behavior can be learned. However, ethical behavior and a true sense of ethics are not the same. Recognizing these differences, it should be noted that even the most reluctant clinical "ethicist" may improve his or her behavior when guided by persistent and fair peer influence.

the orthodontic treatment and now, as you know, she has considerable inflammation and is really trapping a tremendous amount of debris around those large composites that were placed interproximally.

Dr. Perio: Maybe I should get her back in to check those areas, but with more frequent visits I think she'll be

her present restorative situation was really inviting trouble. I also told her that you and I were going to talk and that we would work hard to try to address these problems.

Dr. Perio: Um hmm.

Dr. G: I promised her I'd call after we talked, and also put my thoughts in writing, but even if you think maintenance is the way to go from a perio standpoint, I still can't sign on to just monitor her present restorative status.

Dr. Perio: Well, what do you suggest?

Dr. G: I'll call her and discuss my concerns—maybe you should call her also—and, if in the end, she selects the status quo, you may decide to refer her to someone to help you monitor her problems from a restorative standpoint. But, I believe that since she's had so many consultations

I also told her that you and I were going to talk and that we would work hard to try to address these problems.

After reviewing the case presentation, I would like to have heard the following conversation:

Dr. G: Good morning, how are you? Thanks for calling and thanks for seeing Mrs. P for a second opinion. Obviously, she has significant problems.

Dr. Perio: Well, she may need surgery in the future but I believe I can just follow along with three-month recalls for now.

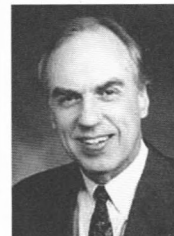
Dr. G: I'm really not comfortable just monitoring her. It appears that she didn't have a perio evaluation prior to

okay. Her dentist is a great guy and a good practitioner and I wouldn't want to create problems for him.

Dr. G: He is a great guy.

Dr. Perio: She really likes the esthetic improvement with those composites and I am sure she won't want to change them.

Dr. G: She may like them now but we know they'll cause problems for her in the future. Without a pre-orthodontic periodontal evaluation it's certainly difficult to assign a benchmark to her perio status but I did tell Mrs. P that without significant changes



Dr. Whiston practices in Arlington, Virginia. He is a Past-president of the American Dental Association.

already she would benefit most from contacting the Peer Review Committee.

Dr. Perio: Don't you think suggesting Peer Review is a little extreme?

Dr. G: Not at all. It's really very non-threatening and given her situation, I believe that's the best way to go.

Dr. Perio: Okay. She's your patient!

Dr. G: Well, she's really our patient, but I'll call her and discuss the options, including Peer Review, and then let's talk again after we both

talk with her.

Several questions must be answered:

1. Did the treating dentists understand the science and evidence that should serve as support for formulating their treatment plan?
2. Did this patient really understand the alternatives, risks, and benefits of the planned treatment? Also, did the patient understand the reasonable sequellae of treatment and was she aware of the doctors' experience in treating similar situations?

3. Did the dentists provide the necessary information, in appropriate language, so that the patient could then give truly informed consent?

The answer to each question ideally should be "yes." However, ethical dilemmas often present subtleties that make seemingly straightforward situations more complex. At such times it is in the best interest of the patient and the profession to focus on clarity and perhaps simplicity. Don't hesitate, do the right thing!

Betrayal of Trust: Reflections on Questionable Dental Practices

Eric K. Curtis, DDS, FACD

Abstract

Dentistry is built on relationships of trust between individual practitioners and their patients and their colleagues. Increasing commercialism may be eroding some of that trust. An inventory of questionable practices is presented along with examples. These include inappropriate care that is unreasonable, aggressive, or intrusive; inappropriate billings, and misrepresenting one's identity or qualifications. Although dentistry is predominantly provided by individual practitioners, it is not practiced in a vacuum.

History's most famous physicians have been those whose life's work brought relief to human suffering. Nineteenth century pioneers such as Lister may come to mind, or later luminaries such as Fleming, Sabin and Salk, or even the humanitarian Schweitzer. In contrast, history's most famous dentists—that is, the dentists most readily recognized by the public—have been salesmen. In the mid-nineteenth century the whole of Western polite society knew about Parisian überdentist Georges Fattet, a colorful self-promoter who attended his patients in a brocade dressing gown. The twentieth

century was flanked on one end by Painless Parker (of whom by the 1920s it was said that only the President of the United States was more widely known) and on the other by Hal Huggins, the anti-mercury crusader rocketed to national notoriety by a 1990 *60 Minutes* television broadcast.

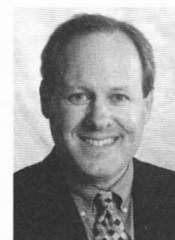
In offering that judgment, I mean neither to indict free market dentistry nor criticize the entrepreneurial urge. American dentistry arguably delivers the world's finest oral health care. Yet the profession's relentless need to sell itself, in concert with its unparalleled autonomy, has produced not only flamboyant doctor behavior but also some notable patterns of patient abuse.

The American College of Dentist's June 2003 position paper, "The Ethics of Quackery and Fraud in Dentistry," enumerates five "patterns of practice that damage patients and the profession": incompetence, using patients as a means rather than an end, unqualified practice, quackery (in which a doctor truly believes in the deceptive treatment he or she offers), charlatanism (in which the doctor intentionally misleads the patient), and fraud. Each of these patterns represents an abuse, or betrayal, of the trust patients place in their dentists.

Dr. Charles Broadbent, past president of the Arizona State Board of Dental

Examiners, divides the most visible abuses of patient trust into six categories:

1. Billing for services not rendered;
2. Overbilling for services rendered, such as reporting routine extractions as surgical procedures, or placing a one-surface restoration and describing it as a multisurface restoration;
3. Overdiagnosing pathology, and overprescribing treatment, to increase profits;
4. Overtreating children, typically from low-income families, by often inexperienced dentists;
5. Obscuring doctor-patient relationships, often occurring in high-volume, high-turnover practices, in which the patient does not know the qualifications of the practitioner (who, for example, may be an assistant instead of a dentist or hygienist);
6. Taking advantage of the unreasonable



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expectations or hopes of desperate patients seeking relief from symptoms of systemic or mental illness.

The price exacted by such problem patterns can be devastatingly high. The kinds of damage resulting from dental treatment alleged in recent complaints from the public have ranged from loss of restorations, time and money to loss of life.

The streamline my observations for this paper, I will sort what I see as current propensities for patient abuse into three piles: inappropriate treatment, inappropriate billing, and inappropriate identity.

Inappropriate Treatment

One measure of a treatment's suitability is its reasonableness to other dentists. "Rational people should be prepared to give reasons for what they say and what they do," Dr. David Chambers wrote in the August 2003 issue of University of the Pacific dental school's alumni magazine *Contact Point*. "Reasonable professionals should be able to give reasons that are acceptable to their peers." Treatment philosophies and modalities practiced by some dentists are simply not reasonable to a majority of their peers. Most practitioners do not accept that root canal therapy makes their patients susceptible to autoimmune diseases. Nor do they likely believe that, say, electrodermal testing can diagnose electrical currents in teeth that could harmfully block acupuncture meridians.

Another measure of a treatment's propriety is its relative aggressiveness.

Most dentists want to practice using knowledge based on scientific studies that are unbiased and reproducible.

Another measure of a treatment's propriety is its relative aggressiveness. Should six or eight veneers be routinely promoted to restore one broken anterior tooth? Should every occlusal stain or groove that registers positive to an electronic sensor be immediately restored?

Many of the charges of quackery leveled against so-called holistic dental care may be related to not only philosophical differences but to the aggressiveness of treatment. Holistic medical practices tend to be vigorously resistant to invasive procedures, eschewing surgical and aggressive pharmaco- and chemotherapeutics (naturopathic practitioners, for example, may refer to allopaths as "cut and poison" doctors) for gentler, "natural" remedies including herbs and vitamins. Yet holistic dental treatment approaches (holistic adherents now pre-

The kinds of damage alleged in recent board complaints has ranged from lost restorations, lost time, and lost money to the lost life of a child.

fer the term "biological" dentistry) are often dramatically more invasive than those of conventional dentistry. For example, the elusive bony pathology known as cavitation osteopathosis or neuralgia-inducing cavitation osteonecrosis (NICO) is treated by aggressive removal of teeth and bone in an allegedly infected area. Dentists pursuing "biological" philosophies may routinely remove amalgams to treat or prevent such afflictions as Alzheimer's, multiple sclerosis and amyotrophic lateral sclerosis (Lou Gehrig's disease). Endodontically treated teeth and teeth suspected of pulpal pathology may be routinely extracted.

A third measure of a given treatment's appropriateness might be its degree of physical intrusiveness. Is craniosacral manipulation, for example, in which the dentist performs chiropractic-like adjustments on the lower back and hips to relieve symptoms of temporomandibular dysfunction, bona fide dental treatment, or does it drift perilously close to fondling?

Inappropriate Billing

Many billing questions arise from the involvement of third party payers. Is it ever acceptable to waive copayments? It is ethical to engage in substitute billing, for example, charging out composites as amalgams at a lower fee so insurance will cover them?

Some dentists seem unable to resist taking easy advantage of the confusion inherent in interpreting insurance benefits. A dental office might charge out every extraction as surgical, every crown as high noble metal, and every prophy-

laxis as root planing. After all, extractions are surgery, right?

Questions often arise from the timing for billing procedures. Is it fraud, or just confusion and miscommunication, when root canals are billed at the access appointment and not subsequently completed? Or when crowns are billed at the preparation appointment and not subsequently delivered?

Money is also at the heart of a good deal of patient dissatisfaction. Many board complaints are sparked or aggravated by two factors: the dentist seemed angry with or indifferent to the patient's complaint, and the dentist wouldn't give the patient's money back.

Inappropriate Identity

A woman recently called my office to ask how to lodge a board complaint. The woman said her mother-in-law had just returned from a disturbing visit to her dentist. Rather, the mother-in-law had visited a dental *office*, where she had received composite resins on several anterior teeth. When she got home, her daughter-in-law observed the results and told the older woman she thought the treatment looked bad, citing bumpy, uneven contours and noticeably rough margins. "We need to call the dentist,"

the daughter-in-law said. "Oh, the dentist didn't do the work," the mother-in-law replied. "He wasn't there. The assistant did it."

An assessment of inappropriate practitioners flags not only incompetence and unqualified practice by dentists, but also dental treatment by non-dentists and unlicensed dentists. For example, an

Other behaviors that obscure professional identity are directly perpetrated by dentists. When California legislation in 1915 blocked Dr. Edgar Randolph Parker from advertising that his dental treatment was pain-free, he famously marched into San Francisco superior court and changed his first name to Painless. Even these days, an ambitious

Many of the charges of quackery leveled against so-called holistic dental care may be related to not only philosophical differences but to the aggressiveness of treatment.

orthodontic assistant might render active orthodontic care to friends, and friends of friends, after hours. The orthodontist who employs her could claim no knowledge of her nighttime activities (although she routinely places brackets and wires on his patients by day). A dentist might practice in partnership with a hygienist who also makes and fits dentures, takes impressions, and delivers crowns. Or a dentist might practice in an office owned by a laboratory technician who diagnoses and fits prosthetics in the doctor's absence.

dentist might purchase a well-known, aggressively marketed practice named for the previous owner and actually assume that person's identity, legally changing his name to that of his predecessor.

In the nineteenth century, it was not uncommon for pastors to also provide dental care. Some dentists today might still be tempted to take on a religious mantle, not only from an altruistic perspective, but as an attempted tax shelter or a way to avoid licensure, collecting "donations" instead of fees for their "ministry."

Appropriate Attitudes

Dentistry's struggle to overcome quackery was the impulse that literally invented the profession. (Hayden and Harris established the first dental school, the first journal and the original dental society partly in direct response to Baltimore street quacks.) There is a potentially delicate balance to be maintained: On one hand, dentistry must allow experimentation, and examine new ideas, for the profession to progress. On the other hand, a standard of care reflects consensus. The amount of trust patients have in their dentists depends on consensus. Dentistry's existence and ultimate progress depend on consensus. Dentistry is practiced by individuals, but not in a vacuum.

Dentistry must constantly practice vigorous self-examination and self-policing. It must investigate all new claims and proposed changes with tolerance mixed with skepticism. And even if dentistry, as a significant amount of the behavior exerted on its behalf suggests, is truly becoming more driven by economics than by patient care, the profession still has a strong duty to ensure that in dental exchanges both buyers and sellers are made better off.

The Role of Professional Journalism in Protecting Against Questionable Practice

John P. O'Keefe, BDentSc, MDentSc, MBA

Abstract

The editor in chief of the *Journal of the Canadian Dental Association* explains that professional journalism alone cannot be expected to protect against questionable practice but it plays a vital role in the network of resources that define standards of excellent and ethical care. According to some, the explosion of biomedical information has created a crisis as emerging science overwhelms practitioners' capacity to intelligently evaluate it and incorporate it into practice. Research in medicine shows that journals play only a part in decisions regarding practice patterns. Some initiatives taken by the Canadian Dental Association to publish professional literature relevant to practitioners' needs to remain current in order to prevent questionable dental practice are described.

In his editorial, in the inaugural edition of the *Journal of the Canadian Dental Association* (JCDA), Dr. M. H. (Harry) Garvin set high expectations for the new publication. He said that it "aspires... to mould the thought of the profession, to guide its hopes, and clarify its problems, supporting all things which elevate and inspire" (Garvin,

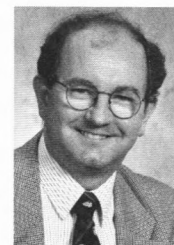
1935). As current JCDA editor in chief, I take very seriously the responsibilities articulated by my predecessor, responsibilities which the officers and regents of the American College of Dentists (ACD) clearly consider to be as relevant today as when Dr. Garvin wrote.

In the position paper entitled "The Ethics of Quackery and Fraud in Dentistry" published in this edition of the *Journal of the American College of Dentists*, the ACD considers it "questionable practice" for a professional to fail "to take reasonable steps to remain current in knowledge and skill," presumably by means that include journal reading. In turn, the dental profession has a responsibility to share information that will benefit patients by means that include reputable journals, web sites and other continuing education opportunities (American College of Dentists, 2003).

Professional journalism is thus a conduit for important information, which the individual practitioner is expected to consume. However, practitioners are now inundated with information, of varying quality, from a range of sources, and many report that they can't keep up with new professionally related information because of information overload (Candy, 2000).

How can professional journalism

hope to have a positive impact on the behavior of practitioners in this increasingly complicated world, where there is more information available to practitioners and the public, but not necessarily more useful knowledge? This paper examines the recent evolution of professional journalism and strategies required to alter the behavior of professionals. It stakes out the role that professional journalism can realistically play in preventing questionable practice. It also briefly outlines the main features of the Canadian Dental Association's current attempts to be an effective knowledge broker and professional community builder.



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Recent Evolution of Professional Journalism

In his 1965 book, *Crisis in Communication*, former editor of *The Lancet*, Sir Theodore Fox described two main types of biomedical publication; the journal of record and the biomedical newspaper (Fox, 1965). The former is dedicated to the reporting of new research findings, while the latter is dedicated to creating professional community.

The crisis in communication had arisen because too many publications were unclear about their role and were not dedicated sufficiently to meeting the needs of readers.

According to Sir Theodore, the crisis in communication had arisen because too many publications were unclear about their role and were not dedicated sufficiently to meeting the needs of readers. Too many journals were publishing too much research in a conventional format that had little or no appeal to the busy practitioner. At the time of writing that book, Sir Theodore indicated that there were approximately 6,000 medical journals in existence.

If we move forward to the turn of the millennium, the number of biomedical publications has increased dramatically. In 1999, there were over 16,000 medical and dental journals listed in Ullrich's *International Periodicals Directory* (Jacoby, 2003). However, it seems that little of substance has changed in the style of journals since 1965.

Dr. Richard Smith, editor of the *British Medical Journal* in a 2002 presentation entitled "What future for medical journals?" tells us that readers are still not satisfied with the offerings of biomedical publishers (<http://bmj.com/misc/talks>). British physicians are very frustrated with the amount and format of the professional information that they are required to digest. We suffer from an information paradox, "Doctors are overwhelmed with information but they cannot find information when they need it."

Canadian dentists expressed a similar type of frustration recently. On behalf of the Canadian Institutes of Health Research, Drs. Christophe Bedos and Paul Allison carried out a survey of Canadian dentists, seeking their opinions about the importance of dental research to their professional lives. Certain questions yielded responses that are highly significant for the JCDA (Bedos & Allison, 2002a, 2002b).

Canadian dentists believe that research results are important to their practice, particularly when it comes to treatment techniques and selection of materials. They perceive the JCDA as a legitimate source of scientific information; however, they want us to find new formats for presenting that information. Their preferred formats for reading research information are "Clinical Abstracts" and "Clinical Practice Guidelines."

We suffer from an information paradox "Doctors are overwhelmed with information but they cannot find information when they need it."

Canadian dentists are seeking very practical clinical research information that they can apply readily in practice. The vast majority of Canadian dentists do not read specialist dental publications, or those emphasizing dental research. The message was loud and clear that we have to find new ways of transmitting information to our primary readership.

The desirability of abstracts and clinical practice guidelines identified in the survey of Canadian dentists was interesting, because it speaks to a trend identi-

fied in the medical literature by Lomas (1993). He described that in recent years the transfer of research knowledge to practitioners has gone through two distinct phases, which he termed *diffusion* and *dissemination*.

For the most part, *diffusion* depends on new knowledge finding its way to practitioners through journals or continuing education programs. Under this model, it was assumed that practitioners would seek out information, would actually take it in, and could appraise its value. All of these are shaky assumptions according to Lomas.

The more advanced model of *dissemination*, assumes that busy practitioners prefer information to be distilled for them by credible organizations and distributed in the form of clinical practice guidelines. Certainly there has been a growth in the development of clinical practice guidelines in medicine in recent years and these are made widely available in print and electronic formats. While availability of guidelines in user-friendly formats is likely to increase practitioners' awareness of their existence, have they had any appreciable impact on the clinical behavior of practitioners?

The Impact of Information on Professional Practice

Changing established human behavior patterns is not easy. The literature of health promotion, particularly the Canadian and European literature, has long recognized that a purely educational approach has a very limited impact on health attitudes, behaviors, and outcomes (Pederson, Rootman, & O'Neill, 1994).

Professional behavior is simply another form of human behavior and it should be amenable to certain influences.

Historically, the professions assumed that education was the best way to ensure that practitioners were up to date on best practices. But we have to wonder if this expectation is well founded.

The paragraphs that follow examine some of the evidence from the recent medical literature with regard to the impact of professional journalism on: (1) the uptake of clinical practice guidelines and (2) physicians' decisions to prescribe newly introduced drugs. This evidence does not provide encouraging news for those who believe that biomedical journalism has a major or sustained role in practitioner behavior change.

Factors Influencing Uptake of Clinical Practice Guidelines. A number of authors have shown that educational strategies alone are ineffective in changing physicians' rate of uptake of clinical practice guidelines. (Cabana et al, 1999; Grimshaw et al, 2002; Moulding et al, 1999, NHS Centre for Reviews and Dissemination, 1999; Tu & Davis, 2002; Wyszewianski & Green, 2000). Each practitioner may experience different barriers to uptake, depending on personal knowledge, attitudes and beliefs, practice circumstances, and patient factors.

The non-peer reviewed literature was found to be far more important than peer-reviewed literature in bringing new medications to the attention of physicians.

Cabana and others present a model demonstrating that there may be barriers to change at numerous points along the chain of events leading from acquisition of knowledge, through attitude change, to behavior change (Cabana et al, 1999). A practitioner may not know of, or be familiar with a guideline (knowledge). He may not agree with the particular guideline, or guidelines in general; not be motivated to adopt it; not believe it will lead to better care; not believe that he can comply with it (attitudes). He may not be able to reconcile it with patient preferences; not feel that

he will be reimbursed adequately for adopting it; not have time, or resources to adopt it (behavior).

Moulding and others show in a model how journals and opinion leaders can play an important role in the early "pre-contemplation/contemplation" stage of behavior change. Those authors feel that

The pharmaceutical industry seems to be quite successful at using a variety of strategies to mould the behavior of professionals.

other strategies that manipulate the environment of the practitioner are vital to ensure subsequent implementation of a guideline (Moulding et al 1999).

Practitioners also differ in their behavior towards new information. Wyszewianski and Green claim that there are four types of practitioner behavior in this domain. They characterize physicians as either: *seekers of information, those that are receptive to information, traditionalists, or pragmatists*. The authors believe that different strategies are required to encourage each type of practitioner to change behavior; with *infor-*

mation seekers being those who are most likely to change as a result of what they read in professional journals (Wyszewianski & Green, 2000).

Factors influencing prescribing behavior. The pharmaceutical industry seems to be quite successful at using a variety of strategies to mould the behavior of professionals. The factors influencing a physician's decision to prescribe a new medication have been studied extensively. This decision is not only based on the innate attributes of the medication in question, but also on psychosocial factors such the characteristics

of the physician, patient preferences and demands, influential professional leaders and the marketing prowess of the pharmaceutical industry (Prosser et al, 2003).

These researchers found in a sample of UK physicians that initial information about new medications came from the

pharmaceutical industry in 49% of cases, from literature in 17% of cases, the media in 16% of cases, and professional colleagues in 13% of cases. The non-peer reviewed literature was found to be far more important than peer-reviewed literature in bringing new medications to the attention of physicians.

The decision to actually prescribe a new medication is usually multifactorial, with the pharmaceutical industry being a major influence followed in descending order of importance by professional experience with other medications, patient factors, influential professional colleagues and written literature. The authors concluded that the mode of communication of information, social and interpersonal factors (pharmaceutical company representatives and medical specialists), along with the physician's own experience were crucial factors influencing prescribing behavior.

The finding of Prosser and others that general practitioners are reactive recipients of information was in keeping with the findings of McGettigan and others (McGettigan et al, 2001). These authors found that while journals are important sources of prescribing information in theory, they are far less influential in practice than interpersonal contacts with pharmaceutical company representatives and respected colleagues.

Peay and Peay in three articles published between 1984 and 1990 (Peay & Peay, 1984, 1988, 1990) found that physicians could be broadly categorized

as being *professionally oriented or commercially oriented* and depending on this orientation they would be better disposed to information emanating from either professional or commercial sources. Commercially produced information tends to be easy to assimilate, while reading professional journals takes time and is hard work. Commercial sources often provide the first information about a new drug, but respected professional sources tend to legitimize the information leading to adoption. Other professionals, particularly specialists, are preferred to journals for this legitimizing of information.

Accepting the limited but important role that it can be expected to play in molding professional behavior, it is essential that the good quality professional journal delivers knowledge in an attractive format that is appealing to the reader. To survive, and be relevant, the journal needs readers. No matter what forces work to fragment a biomedical profession, the professional journal is an excellent means of building professional community by speaking to all practitioners about what they in common: an interest in knowledge about clinical practice, and an interest in issues having an impact on the future of their profession.

The main ideas underpinning these documents are: know your readers' information needs; provide accurate and credible information; make sure that that information is pertinent to the readership and easy to assimilate. To achieve these goals, we have adopted a combined print/electronic publishing strategy, attempting to use the best features of both media to our advantage.

One means of capitalizing on the different strengths of both media is publishing the full text of certain articles in the electronic version of the JCDA only, with a one-page summary in the print version of the publication. This strategy was suggested by Sir Theodore Fox in 1965 and was introduced by the *British Medical Journal* in 2001. At the time of writing, we have published thirty articles in this format. This strategy has allowed us to continue to work on making the paper version of the journal an easier read for busy practitioners, while allowing us to publish good quality scholarly articles in the electronic version of the publication.

Another important feature of our publication efforts is to create a forum for dentists to articulate opinions about issues that are important to the profession. The "Debate" section of the JCDA is designed for the presentation of ideas and opinions. Many of the opinion pieces published in this section have promoted the development of good pro-

It is clear to me that professional journalism alone cannot be expected to protect against questionable practice.

Implications for Professional Journalism

It is clear to me that professional journalism alone cannot be expected to protect against questionable practice. It can however play a valuable role as part of a "coordinated implementation plan," as described by Lomas (1993). In the model proposed by this author, educational materials impact on the practice behavior of the practitioner along with forces in the professional community, the regulatory authority, third party payers and an informed public. If all stakeholders in the practitioner's environment can credibly press for exemplary practice by various means, questionable practice becomes more unlikely.

The professional journal can make accurate, pertinent, and timely information available in a usable manner to practitioners and stakeholders thus exerting an influence on professional behavior. It will be up to third-party payers, regulatory authorities, and patients to put in place a set of rewards for good professional behavior and sanctions for undesirable behavior in order for questionable practice to be further marginalized.

Of course the modern journal may take a variety of forms, profiting from the benefits conferred by new technologies.

The Canadian Dental Association Applies These Ideas

Influenced by the writings of Sir Theodore Fox and Dr. Richard Smith, as well as the editorial direction of three medical journals (*British Medical Journal*,

If all stakeholders in the practitioner's environment can credibly press for exemplary practice by various means, questionable practice becomes more unlikely.

American Family Physician, and *ACP Journal Club*), a new direction has been established for the JCDA and other CDA publications. Two internal documents entitled "Communicating better with the dentists of Canada" and "Knowledge transfer—key to the dentist/patient interaction of the future" (O'Keefe, 2002, 2003) have set out priorities for the publications.

essional practice. In this respect, JCDA is similar to the *Journal of the American College of Dentists*.

As was the case in 1935, the JCDA is firmly dedicated to enhancing and advancing the dental profession through collegiality and clinical excellence. We aim to have a positive influence on the dental profession through good quality clinically pertinent information that is

actually read. By providing a lively discussion forum for our profession we hope to create a climate where questionable practice is minimized.

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Quackery, Fraud, and Denturists

Robert B. Stevenson, DDS, MS, MA

Abstract

Denturism is questionable dental practice, even in those few states where it is licensed. Incomplete or incompetent care is quackery. In the early 1980s a few states liberalized their laws to allow denturism to those who were educationally qualified. This experiment has generally failed because all accredited training programs have closed, because prices charged by denturists have about reached parity with dentists' fees, and because of limited demand for denturists' services. Because of the complexity of the message about scientifically-grounded oral health care and the populism of stories about the poor and underserved, dentists must be vigilant regarding their interactions with the media.

For discussion here, denturists are defined as unlicensed individuals who supply, fit, or deliver complete dentures to patients directly, without supervision by a licensed dentist. This paper will examine characteristics of denturists and compare them with common signs of questionable care, fraud, and quackery.

Webster's *Medical Desk Dictionary* defines the quack as "an ignorant or dishonest practitioner." All unlicensed dental technicians who practice dentistry illegally are "dishonest" by definition, and many are ignorant of how much necessary dental knowledge they lack. Most patients also lack the dental knowledge

to make informed decisions about their prosthodontic care, and they need the advice of an honest, competent dentist.

Denturists' practice has a long, sad history, which led in part to the Federal Denture Act of 1948. One visible result is the common label on dental products, "Caution: U.S. federal law restricts this device to sale by or on the order of a dentist." The specific law is Section 1821 of Title 19, U.S.C., enforced by the Department of Justice. It is based on the

Limited Liberal Laws

Most states currently have laws against the supply or delivery of dentures by nondentists. Although legal in some states and countries, many licensed denturists illegally provide removable partial dentures (Tuominen, 2003). There have been repeated challenges to state laws regulating denturists in the past fifty years, and the central question of unsupervised prosthodontic practice always boils down to competence.

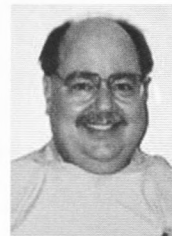
The central question of unsupervised prosthodontic practice always boils down to competence.

Federal Denture Act, which puts federal teeth into state laws and prohibits:

1. The taking of impressions or casts of the human mouth or teeth by a person not licensed under such laws to practice dentistry,
2. The construction or supply of dentures by a person other than, or without the authorization or prescription of, a person licensed under such laws to practice dentistry,
3. The construction or supply of dentures from impressions or casts made by a person not licensed under such laws to practice dentistry.

Violators shall be fined not more than \$1,000 or imprisoned not more than one year, or both. Reports of violations of the Federal Denture Act should be referred to the Center for Devices and Radiological Health, Office of Compliance, for review.

Laboratory fabrication of a denture prosthesis is only a part of prosthodontic treatment. The practitioner must be able to detect oral diseases as well as detect oral manifestations of systemic disease. The practitioner must be alert to possible hazards to the patient if dentures are placed on unhealthy tissues and the hazards if appropriate precautions are not taken in response to certain observed medical conditions.



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Patients are not likely to be able to evaluate the adequacy of an oral examination or the competence of the person providing their dentures to perform such an examination. That is why accredited training, strict competency exams, and a bona fide license are necessary.

Aside from the fit of the denture, there are psychological aspects of prosthodontic treatment. A certain amount of patient cooperation is required, and expectations must be reasonable. Follow-up aftercare, such as denture adjustments for sore spots, must be provided in a professional manner at or above the standard level of care. Office cleanliness and infection control procedures grow more complicated every year.

Where can a young, potential denturist go to learn all of the above? Currently, there are no accredited denturist programs offered in the United States.

The 1987 JADA article titled "Questionable care: what can be done about dental quackery?" notes one way to spot a quack; "Displays credentials not recognized by responsible scientists or educators, including 'degrees' from unaccredited schools." An example is Mills Grae University, an unaccredited school that offers the nation's only DDM degree—Doctor of Denturity Medicine.

The average fees charged by denturists rose every year once they became legalized, and in many places the denturist fees were close or equal to those charges by dentists.

According to an article by Steven J. Diogo in the March 2002 *AGD Impact*, Mills Grae University supposedly was based in Kalispell, Montana, but there is no brick-and-mortar school there. Montana is one of the few states where denturists are permitted to practice. Cort C. Jensen, an attorney for the Montana Office of Consumer Affairs, said the operation is one of dozens of Internet-based "diploma mills" operating in Montana and other states that have slim

resources for hunting them down.

The Mills Grae president, Ronald Gerety, DDS, PHD, was reached in Pensacola, Florida, and told *AGD Impact* that the website was being "reconstructed" and is still accepting students. The school charges many thousands of dollars

Organized dentistry worked with many state dental associations to combat illegal dentistry.

for the denturity program, administered via correspondence or online via the Internet, with on-site workshops offered twice a year, according to the article.

Attorney Jensen said he has no opinion on denturity, "I don't care if they're offering degrees in denturity, physics, or janitorial services. The fact is you can't use college words like 'bachelor, master or doctorate degree' without the permission of the Board of Regents" (the state education accrediting agency). The Florida Commission on Independent Education is also investigating Mills Grae's presence, according to the *AGD* article.

Since there is no accredited denturist training program in the United States, denturists might resort to displaying certificates or diplomas from recognized

obscure, pseudoscientific journals, or the public media." Denturist advocates often point to the 1980 document, "The sale of complete dentures: effects of present and alternative regulations" (Federal Trade Commission, 1980). Released by the San Francisco regional office of the

Federal Trade Commission, this report was submitted by an attorney and a consumer protection specialist. The four-hundred-plus page report contained statistics related to edentulous populations and prosthodontic fees in the United States and in Canada. Around one hundred pages of the report, which reflect predecisional opinions, recommendations, and conclusions of the staff are deleted and protected from mandatory disclosure by FOIA exemption. The Federal Trade Commission never acted on the report which seemed to favor the Canadian model of denture delivery, but was not conclusive.

According to Matthew Daynard at the Washington D.C. Office of the FTC, in a personal communication, the "commissioners decided long ago that 'scope of practice' is outside the expertise of the trade commission, and it is loathe to try to second-guess individual state dental boards or the U.S. Department of Health and Human Services."

The American Dental Association has always held the position that only licensed dentists are competent to make final impressions and insert or fit dental prostheses. There was a flurry of legal activity in the 1970s that led to decriminalization of dental practice by nondentists in a few small states. Organized dentistry worked with many state dental associations to combat illegal dentistry.

In a 1976 article published in the *Journal of Prosthetic Dentistry*, Fletcher argued that one of the keys to reducing denturist fraud is to promote better relations with dental laboratories. "New members in the local society must

attend an orientation meeting where, among other things, they are instructed how to deal with a dental laboratory:

1. Get to know the laboratory of your choice,
2. Send the same high-quality casts and records you would expect in return,
3. Send adequate written instructions,
4. Do not send the patient to the laboratory for any reason,
5. Pay your laboratory bill promptly."

In 1980 the ADA released a Public Information Manual on Illegal Dentistry. The denturists' themes and strategies were outlined, along with the dental profession's overriding objectives to counter the denturists.

In 1984 the ADA released a Status Report on care provided by dentists and nondentists in the U.S. and Canada. The various states' denturist laws enacted all included training programs, and by the 1984 report all of the denturist training programs had failed. The future demand for denturist schools was apparently deemed too small for any state governments to invest in them.

The ADA studies also found that the average fees charged by denturists rose every year once they became legalized, and in many places the denturist fees were close or equal to those charges by dentists. Furthermore, denturists tended to practice in the same cities and large

Canada and Oregon. The particular denturist advocate was a dental technician recently retired from the military, who had opened a dental lab in a city of fifty thousand inhabitants. When he contacted the local newspaper about the denturist movement, it ran a story about the new denturist and the campaign, generating some feedback and letters to the editor. Next, the denturist took the clippings to the state's capital, and again met with the newspaper editors, who decided to pursue the story.

At approximately five minutes before five on a Friday afternoon in October, 1987, an investigative reporter from the daily metropolitan telephoned a local prosthodontist in private practice and requested an interview regarding the subject of denturists. The questions asked were straightforward, very similar to the sample questions contained the ADA materials for dealing with the media. The prosthodontist had a copy of the ADA guide handy, and replied with recommended answers. For example, when the reporter asked about the Canadian provinces where denturism was legalized, the reply was read directly from page 20 of the ADA Public Information Manual on Illegal Dentistry:

Between 1966 and 1972, five different studies of denturism were conducted by Canadian governmental units. Each concluded, just as an earlier study by the World Health Organization, that denture care for health reasons should be under the supervision of a fully qualified dentist. However, the Canadian provincial governments ignored the studies and acted to lower oral health care standards, making the public the loser.

The reporter immediately asked for specific dates and sources of these studies, but when he was referred to the ADA for details, the reporter replied that there was no time to check further because the story was going to be published very soon. The unexpected phone call had many earmarks of the "Ambush Interview" technique made famous by Dan Rather on the 60 Minutes television show.

The moral of the story is that individual dentists should be extremely careful when talking to the media about questionable practices.

In Canada and in those states where denturists prevailed, there was wide discussion in the public media leading up to political referendums, and denturists often seemed to be favored in the press. "Comfort the afflicted and afflict the comfortable" is an old newspaper axiom. To the uninformed readers and editors, dental laws appear to merely protect dentists and force many poor elderly patients to pay unfair fees for dentures. The dentist's message about health hazards and biologic training and professional standards was lost in the rush to find cheaper dentures.

A Failed Experiment

In the early years following liberalization of regulations in some states fees charged by legal denturists were significantly lower than those charges by dentists (Rosenstein, 1980). A study in 1985 suggested that denture fees charged by dentists were being held down by competition from cheaper denturists, but concluded, "unfortunately, there are as yet no reports on the oral health of patients treated by denturists" (Rosenstein, Emphy, Chido, & Gary, 1985).

towns where dentists already practiced, which was no help to patients living in remote, under-served areas.

One explanation for the steady fee increases is that when denturists were practicing underground, they avoided many typical overhead costs such as license fees, costs of license examinations, liability insurance premiums, (for the same reason unlicensed drivers cannot buy auto insurance). Perhaps some avoided declaring the income from their illegal practice on tax returns. Such expenses may force denturists to raise their fees in order to maintain previous levels of take-home pay.

Vigilance Regarding the Media

Nevertheless, the underground denturist movement continued to work toward legalization around the country. In 1987, a denturist in a large Midwestern state tried to rally dental lab technicians. (Names have been withheld in the following description of what happened.)

Dental labs across the state were solicited for contributions to mount a legislative campaign similar to those in

The story appeared the following Monday morning on the front page of the local section, with a photo of the dentist holding an articulator and mounted dentures. The usual selling points for the dentist movement were made. The story quoted the dollar amount (\$165) charged by this dentist for "a complete set of well-fitting, high-quality, long-lasting dentures." The prosthodontist was quoted saying dentists "can't provide an oral examination (and) lack the training to make quality impressions." The dentist claimed, "I could teach you to make an impression in ten minutes and take a bite in fifteen minutes."

There were no subsequent letters to the editor, and no further dentist stories were published. The particular dentist activist later moved to another state. Evidently, once word got around that he was practicing dentistry illegally, ethical dentists stopped sending their denture cases to his lab. The particular state has seen no other similar dentist efforts since then.

The moral of the story is that individual dentists should be extremely careful when talking to the media about questionable practices. Just refer those questions directly to the American

Dental Association (or state association), where spokesmen are trained to deal with reporters about those hot button topics. Practicing dentists have little to gain and much to lose by grappling with the media. The American College of Prosthodontists also works actively with the ADA in the fight against dentists (Williamson, 1995).

With no denturism training programs currently available, it is now impossible for any new dentist to become licensed in any U.S. state. The dentists' legal movement could wither on the vine if the present handful of licensed dentists eventually retire and is not replaced by younger licensed dentists. But don't be complacent.

The dental profession must remain vigilant, because there will always be illegal dentists who prey on denture wearers. Dentists are just as dangerous as any other fraudulent practitioner or quack. Uninformed patients will continue to seek their denture service, and that's why laws are necessary—to protect those patients.

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Charlatans in Dentistry: Ethics of the NICO Wars

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Abstract

The scientific and diagnostic status of neuralgia-inducing cavitational osteonecrosis, NICO, has not been definitively established. A case is presented in favor of this diagnosis based on published literature. It is argued that the case against NICO has been made largely based on personal experiences, by innuendo, and through personal attacks rather than in scientific debate.

Ignaz Philipp Semmelweis would have understood. He was a Vienna-based Hungarian physician who in the 1840s, before the germ theory of infection existed, established through a case-control investigation that the simple act of washing hands between patients, and especially between the performance of an autopsy and a patient examination, dramatically reduced the mortality rate in his maternity ward (Thompson, 1964). At the time, postpartum deaths from septicemia were occurring at an alarmingly high rate throughout Europe. In a hospital ward supervised by Semmelweis one in five young mothers died after giving birth. With hand washing this rate fell to a negligible number. When hand washing was discontinued the rate rose again. Results were published in the *Vienna Medical Society Journal*, one of the most

widely read journals of its time, and confirmed by U.S. and British reports.

This convincing experimental evidence should have persuaded all physicians, and especially obstetricians, to take up the habit in earnest. However, while his advice was eventually followed by numerous progressive physicians within his own country, in many other quarters his work was treated with ridicule and abuse. Semmelweis was thought to lack proper respect for the knowledge and authority of his elders. Physicians felt that more concern should be given to a doctor's dignity than to the needs of females. Hide-bound tradition prevented many from altering practices which had remained unchanged since the Dark Ages.

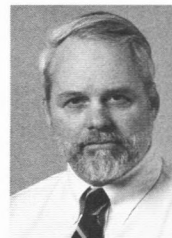
NICO, The Disease

The authors of the present essay have had the privilege and the headaches of becoming personally involved in a similar Semmelweis scenario. This scenario requires a clinician to become knowledgeable about relatively common but obscure disease processes not previously well-understood: ischemic bone disease and low-grade infection of the maxillofacial bones.

These processes for several reasons are challenging for both the clinician and the patient. Firstly, the associated pain is often very severe, neuralgic, and intractable. Secondly, since these are

marrow diseases there is little alteration of the surface mucosa (edema, erythema, etc.) or the radiograph, even in severe cases. Thirdly, clinicians are tempted and trained to use a facial neuralgia or trigeminal neuropathy diagnosis for idiopathic pain once tooth- and sinus-related causes are ruled out. Therefore, the clinician has difficulty including the disease in a differential diagnosis, appropriate marrow evaluation is not done, and the patient must suffer excruciating, unbearable pain as well as doctors who repeatedly suggest that the pain is psychological or psychosomatic.

This disease process is now called NICO (neuralgia-inducing cavitational



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osteonecrosis), a name emphasizing its two most unique features: the neuralgia-like character of associated pain and the very unique ability to desiccate and hollow out large marrow spaces. Pain-free cases also occur, usually referred to as subclinical or silent NICO, or maxillofacial osteonecrosis.

similar to those of other affected anatomic sites. Regardless of the site involved, however, the disabling pain, the well-known diagnostic subtleties and the demanding nature of the therapies make ischemic bone disease one of the more problematic disorders in humans.

At that time NICO, under several diagnostic names, became one of the great controversies of dentistry, termed by some the "NICO wars."

Our profession's involvement with this disease process began early, coinciding with the birth of modern, organized dentistry. Initially called bone caries because it was considered to be an infection without pus (like tooth caries today), it was not an uncommon problem in the nineteenth century world of heavy metal pollutants and malnutrition (Ferguson, 1868; Noel, 1868). The disease essentially disappeared from the twentieth century dental literature until a flurry of research activity toward the end of the century dramatically increased our understanding of its pathophysiology and our ability to appropriately diagnose it.

It is now understood that NICO is the jawbone version of a skeletal disorder, termed ischemic osteonecrosis, avascular necrosis, aseptic osteomyelitis or bone marrow edema, with a long and active research history in the orthopedic surgery literature (Bouquot & McMahon, 2000; Neville, Damm, Allen, & Bouquot, 2002; Urbaniak & Jones, 1997). This disorder is not so much a disease in its own right as it is an end-stage result of poor marrow blood flow and stagnation. It is usually associated with one or more inherited hypercoagulation states and often with a superimposed low-grade infection of odontogenic origin (Bouquot & McMahon, 2000; Gruppo, Glueck, McMahon, et al, 1996).

The histopathology, etiologies, clinical features, and therapies for NICO are

The Controversy

So what does all this have to do with Semmelweis? In one sense, many clinicians would like to "wash their hands" of this disease. It is too difficult, too time consuming, and treatment is too often unsuccessful. This has led many clinicians to simply avoid the diagnosis. However, an additional and potentially greater problem emerged in the 1980s, when the disease became intimately associated with idiopathic facial neuralgias.

At that time NICO, under several diagnostic names, became one of the great controversies of dentistry, termed by some the "NICO wars." While a reasoned progression of peer-reviewed publications has been adding to the literature, outside the literature the dialogue has more typically been characterized by personal opinions and belief systems, and the tools of "debate" have too often been ridicule and abuse. The healthy and necessary scientific debate of new concepts and disease characterization is almost completely lacking in this arena. The debate seems, rather, to be some sort of religious argument between NICO "believers" and unbelievers."

Enter the charlatan: "a pretender of knowledge and skills that one does not possess, also called a quack" (Anderson, 2000). Usually those referred to as quacks or charlatans are individuals using practices *without* a corroborating literature base. In the NICO wars these disparaging names are bantered about with remark-

able frequency, but the most intriguing feature to us is the fact that the charge of quackery has been turned on its head. The clinicians being labeled as quacks are those actually using as source material a published literature of more than one hundred and sixty peer-reviewed papers, abstracts and book discussions pertaining to head and neck lesions (www.maxillofacialcenter.com/osteonecrosis). Moreover, this literature uses as its base more than two thousand publications in the orthopedic surgery, rheumatology, and laboratory medicine literature.

The NICO literature is filled with microscopic and clinical photos and descriptions, published by a variety of dental specialists, and a very extensive review was published in 2000. To date not a single research paper has been published in a peer-reviewed setting which refutes in any way the data provided by the NICO literature. Yet, it is not unusual for a dentist to dismiss ischemic bone disease out of hand by simply stating that NICO does not exist, and then proceed to belittle or threaten legal action against those clinicians willing to help NICO patients.

The reason for this completely escapes us, even though the irony has not. Moreover, the vehemence of the "anti-NICO" attacks has been so severe and so anti-intellectual that it lends wonderful credence to the old adage that those who know the least about a subject have the strongest opinions. We think that Semmelweis would have understood.

Attacks in the litigious climate of modern America often take the form of nuisance lawsuits and threats from state licensing boards. Within our own states, where we are well known, we have had no legal problems relative to this disease, but attacks occurred in the past with some regularity. One of us (JEB) was even accused in a legal suit of *inventing* the disease in order to enhance his income (Baratz, 1995). Thus far legal attacks have had little or no consequence for us, other than making us more visible and thereby helping to grow our practices. It is clear, however, that much of this activity has ethical ramifications

if not based on established fact.

Such attacks have been encouraged by the largely discredited and self-appointed vigilante group, the National Council Against Health Fraud. This group, which seems to believe that the worst sin in dentistry or medicine is to be unconventional, has for years suggested that any patient receiving a diagnosis of NICO should report it immediately to their state dental board and consider filing fraud and RICO (Racketeer Influenced and Corrupt Organizations Act) conspiracy charges against any "quack" who would be foolish enough to diagnose ischemic bone disease in the jaws (www.quackwatch.com). They have publicly reported that dentists in multiple states have lost their license because of "Dr. Bouquot's diagnosis...or tax fraud." The latter charge was included to prevent a libel suit and is certainly true, since dentists in many states do lose their licenses because of tax fraud. But the former statement is completely untrue. On the contrary, we have been instrumental in helping to keep the licenses of NICO surgeons being attacked by their boards.

This council is not fairing well in their attacks against NICO doctors and "alternative" health care providers in the courts. Their lead expert witness (and president) has even had contempt of court charges filed against him for falsifying his qualifications and a grass-roots movement has arisen to watch the "quackwatchers" and assure that unethical behavior is not countenanced (www.quackpotwatch.com). Fortunately, the council seems to be undergoing disorganization and will thankfully soon fade into the past as just another bad idea in American dental politics.

Attacks from state licensing boards have often been personal and remarkably illogical, and it is tempting to question the ethics of some boards. Is it ethical, for example, for a board to take away the surgical privileges or license of a dentist treating NICO patients without a hearing, without an independent investigation, largely based on the word of a single dentist? Is it ethical for a board to

refuse outright to accept a histopathologic diagnosis of ischemic bone disease and seek a diagnosis more to its liking (i.e. anti-NICO), even after two, three, or four nationally recognized oral pathologists confirmed marrow disease from review of the original microscopic slides? Is it ethical (or wise?) for a board to refuse to accept as credible any expert witness who used the dental literature as the basis of his or her opinion, while accepting, seemingly without question, comments made by quackwatch-associated individuals who have not reviewed the literature and who admit to no experience with the disease?

Is it ethical for a board to arrange for the publication in statewide newspapers of fraud charges against a NICO surgeon before a hearing is even scheduled? Or to let a state dental journal publish an announcement of license revocation before a defending dentist has had his hearing (the dentist was exonerated)? Should we question the ethics of a board that shows such a bias against NICO that it only behaves honorably when exposed to regional and national TV coverage?

To date not a single research paper has been published in a peer-reviewed setting which refutes in any way the data provided by the NICO literature.

These types of activities are not so rare, in our experience, in an atmosphere which allows or encourages terms such as quack or charlatan to be irresponsibly applied. The white paper on quackery published elsewhere in this journal is a strong step toward clarifying this problem and recognizes that it is sometimes difficult to separate charlatanism from leading-edge research and the ideas destined to become tomorrow's dental practice.

Sorting It Out

Oliver Wendell Holmes pointed out that "the mind once expanded by a new idea can never return to its original size." We believe that the concept of NICO is well

on its way to the stage of inevitable acceptance, but are there valid criticisms of the concept as it stands today? Certainly. The best critique of the NICO literature concluded, correctly, that more research is needed and that NICO is not proven to be the cause of all idiopathic facial pain (Zuniga, 2000). Most of the more specific and more commonly applied criticisms, however, completely ignore the literature. Several examples might illustrate this point (we have heard all examples many, many times).

First criticism: NICO does not exist. This is to say that ischemic bone disease, which is among the most common of the skeletal disorders and is triggered by trauma and local infection, cannot occur in the jaws, the bones most likely to be traumatized or infected. Such a criticism is too unfounded to be taken seriously.

Second criticism: I have never seen this disease while some clinicians see it everywhere. In the first place, one doesn't see what one doesn't know about, but beyond that, certainly many diseases exist which are not seen by the majority of U.S. dentists—this in no way refutes their existence. Today, many of the clini-

cians willing to work with NICO patients are overloaded by the sheer number of individuals seeking help. This primarily arises from the inability or refusal of other clinicians to diagnose the disease but the end result is that patients concentrate around clinicians able to help them. The prevalence rate for biopsy-proven NICO, moreover, is known: adult females = 1 per 2,000; adult males = 1 per 20,000 (Bouquot & McMahan, 2000).

Third criticism: NICO lesions cannot be seen on radiographs. In fact, they usually can be seen, but the changes are very subtle and require a fair level of experience and clinical suspicion.

Moreover, this problem occurs with extreme frequency in osteonecrosis of other bones, such as the hip. Poor visibility on radiographs might even be called a characteristic of this marrow disease. Technetium radioisotope scans, quantitative ultrasound and diagnostic anesthesia testing are more appropriate diagnostic tools for jaw lesions (Bouquot & McMahon, 2000; McMahon, Griep, Marfurt et al, 1995; Neville, Damm, Allen, & Bouquot, 2002; Urbaniak & Jones, 1997).

diagnosis of NICO. To the best of our knowledge, no survey of U.S. dentists has pertained to this disease. The literature, however, has accepted many papers relating to it. NICO questions have been asked on national certifying exams and a microscopic case has been included in the Continuing Competency exam of a national pathology association. A set of microscopic slides of ischemic jawbone disease sent to 15 oral pathologists in North America and Europe resulted in diagnoses of inflammatory or ischemic

actions should not be taken seriously unless a thoughtful and objective review of the subject (dentist or topic) has been undertaken. Otherwise, ignorance dominates the debate. We think Semmelweis would have understood.

Attacks in the litigious climate of modern America often take the form of nuisance lawsuits and threats from state licensing boards.

Fourth criticism: Multiple and bilateral alveolar lesions occur frequently; this is not consistent with a bone infection. True, this is not compatible behavior for infection but is very compatible, even characteristic, of ischemic bone disease.

Fifth criticism: The associated pain has a neuralgic character; this is not typical of jaw infections. True, but it is very typical of ischemic bone disease, regardless of the anatomic site involved. The pain in the jaws is typically similar to the pain in the hips, knees, etc. In the jaws, however, we attribute neuropathic characteristics which are seldom applied to lesions in other bones.

Sixth criticism: NICO surgeons are curetting normal bone; NICO pathologists are diagnosing bone "disease" in normal tissue samples. Even on the surface this has always been a ludicrous criticism. The microscopic features used for a NICO diagnosis are similar to those used for a diagnosis of osteonecrosis in other bones—they might be subtle but they are in the literature. To enhance our diagnostic acumen, in fact, the present authors have visited with most of the world's authorities on the histopathology and treatment of osteonecrosis of the jaws, hip and knees, learning much from the exchange of cases and concepts.

Seventh criticism: No one accepts the

disease from all but 2 of the pathologists. On a more personal note, very few of our NICO papers have been rejected and we have personally delivered more than 100 research presentations and invited lectures at universities and national or international scientific meetings.

Eighth criticism: NICO research is worthless. Well, we suppose that virtually all research has its flaws. However, the published NICO literature is very standard and remarkably similar to other clinicopathologic and pain follow-up investigations. The present authors have received an award for outstanding research from the American Association of Oral & Maxillofacial Surgeons, have had a paper featured as the cover story of a highly respected medical journal (*Journal of Laboratory & Clinical Medicine*), and were asked to participate in a major research grant directed toward this disease (Indiana University Medical Center).

It has been quite a journey for us, to be sure, and one which we would gladly undertake again. We welcome critical comments of our work or any other work relative to this fascinating topic, but we do ask that the discussion remain on a professional level. Shouting names like quack and charlatan might make a clinician feel nicely self-righteous, but such

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Dental Fraud: An Introduction

Max H. Anderson, DDS, FACD

Abstract

A manager of a dental benefits program defines fraud and abuse in the dental context. Such practices may cost as much as four billion dollars annually and have a damaging effect on the trust the profession places in the profession and on the way dentists relate to each other.

Fraud is criminal offense that is punishable, depending on its magnitude, by fines, imprisonment, and the loss of a professional license and its privileges. Fraud has specifically definable elements. Legally, fraud is generally considered to require the presence of all of the following nine elements. There must be:

1. Representation of a distinct fact or facts,
2. That is material,
3. That is false, and
4. That the presenter knows to be false or is ignorant of their truth, coupled with
5. Intent that the fact or facts should be acted on by the person to whom presented,
6. Ignorance of the falsity on the part of the person to whom the presentation is made, such that that person
7. Relies on the truth or representation, and
8. Has a right to rely on it, and
9. Suffers damages as a consequence.

Fraud constitutes a sociopolitical offense that harms individuals or institutions by whom and against whom

fraud is committed and the entire health profession's community. Dentists should clearly understand the activities that constitute fraud in order to avoid pitfalls and errors of omission that might constitute fraud.

The intent of this article is to clearly define fraudulent activities and give examples of those activities where they are not obvious. It is my hope that this paper will inform the dental community and thereby reduce fraudulent practices.

Social and Political Background

Fraud exists in our society both inside and outside of the healthcare system. By some estimates, fraud accounts for as much as 10% of the health care dollar. If we use the current estimate of \$1.4 trillion dollars being spent on health care in 2003, then a total of \$140 billion dollars may be fraudulently consumed this year. Dentistry accounts for about 5% of the total health care dollar or between \$65 and \$70 billion dollars in 2003. Because about half of dental care is pre-paid, compared to 85% in medicine, it would be possible to estimate the cost of dental fraud in the range of \$3.8 to \$4.1 billion dollars.

As a point of departure, it is useful to think of fraud in the rubric of our overall society. Our socioeconomic system is arguably in the midst of a transition from a capitalistic model to a knowledge-based economic model. In a strict capitalist model, businesses build and move goods. Assembly lines with uni-

form work, and individual workers with primarily mechanical skills, predominate. In a knowledge economy, individuals who have an emphasis on intellectual and analytic skills perform the work of production of knowledge from raw information. This shift in the emphasis of the work force and its skill sets, leads to changes in behavior of purchasers/workers. Purchasers, including health care purchasers, with access to information, analytic skills and refined knowledge, exhibit greater consumerism than have previous generations. All of this at a time when the individual patient is being asked to contribute to the costs of health care programs. Suddenly the patient is more interested in the total costs of care. This changing dynamic has fostered changes in our health care systems where informed consent is now much more rigorously defined and applied. Choices need to be clearly explained in an unbiased manner so that the patient can exercise their free will in selecting from alternative treatments where available.



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The line between unbiased informed consent and biased steering to specific procedures that are more economically advantageous for the dentist, or where the dentist has other interests, is a clouded area. Fraud can occur in this domain when the bias and steering is severe. An example of this kind of fraud is steering a patient to a full coverage restoration when a simpler restoration is the community standard of care.

One final note in the sociopolitical arena involves the damage to trust that exposed fraud creates for the profession. With events such as the Enron case in our recent collective memories, fraud has taken on heightened acuity in our society. When a health professional is publicly exposed for fraud, all others in the health professions are damaged. This damage is profound in the health professions because of the trust placed in health care professionals by patients who are not equally knowledgeable about their conditions. When the health professional is a dentist, all other dentists suffer some loss of trust, regardless of their lack of complicity. In a knowledge economy, the damage is no longer local. The web and other mass media sources

quickly move local information to regional, national and international information thereby damaging our profession.

in the purchasing of health benefits such as insurance programs. Fraudulent enrollment can be an issue for dental plans. Individuals who are not eligible

Dentists should clearly understand the activities that constitute fraud in order to avoid pitfalls and errors of omission that might constitute fraud.

Places of Fraud

Fraud can occur at several places in the dental delivery system. The primary thrust of this article is fraud in the dental office. However, fraud occurs in other areas such as dental research and in health plan purchasing practices.

Fraud in research, especially in applied research, is particularly pernicious because it may influence clinical decisions of those gaining knowledge of the research and countless patients. The more well known the researcher or research facility, the more face value they have and the greater chance for application of the false or misleading data.

Fraud also has the potential to occur

for the coverage purchased can be enrolled. This is an issue when their dental needs exceed those that have been underwritten. A final element in this category is the falsification of employment dates. This fraudulent enrollment of employees can occur when the employee has had dental needs addressed before employment eligibility and they have encountered financial hardships for whatever reasons. Well-intentioned managers trying to help such patients can commit fraud by altering their employees' eligibility records. In this case, the back premium paid is not sufficient to cover the expenses incurred prior to the employee's actual eligibility.

Some Examples of Fraud Encountered in Dental Offices

Over-treatment	Providing a crown when the standard of care would dictate a simpler restoration is appropriate
Providing unneeded services	Providing for which there is no clinical justification to an underinformed patient
Under-treatment	Failure or delay, due to any intentional practice or policy, to provide needed and covered services in prepayment systems
Date of service	Misrepresenting the patient's eligibility for benefits falsification
Falsifying records	Concealing information, altering records, or switching parts of records to misrepresent either the condition requiring treatment or the treatment rendered
Upcoding	Filing for procedures that carry higher reimbursement rates than the procedure actually performed
Waiver of copayment	Accepting insurance payment as the entire payment (Exceptions may exist so that immediate family and professional colleagues may be legitimately waived.)
Failure to disclose	Attempting to receive two primary payments for one coordination of benefits treatment

Types of Fraud in Dental Practice

Fraud in dental offices falls into a number of areas, but generally has the intent to receive remuneration for services not due or not required by the patient's condition. The accompanying table describes fraudulent activities that have and do occur in dental offices.

Providing false evidence can take several forms. The most common is the inflation of periodontal readings to create a case for more complex intervention. In extreme cases, this involves periodontal surgical intervention where there is no periodontal pathology. A less common form of fraud that is now being detected is the use of one patient's radiographs to justify a procedure on another patient where the dental office believes that the case will not qualify for an insurance benefit. Large photo databases searchable by dentist can easily detect a "favorite #20."

While these are some of the primary forms of fraud, they are by no means all inclusive. Statutes that define fraud may vary between states and between federal and state definitions but they generally contain the three attributes of (1) intent to deceive (2) by providing false or misleading information (3) for gain.

Abuse

Abuse is different from fraud. Abuse is defined as practices or patterns of inci-

dents by health care providers or enrollees that are inconsistent with accepted and sound professional, business, or fiscal practices, but which do not meet the elements of fraud.

Examples of program abuse include:

- Over-utilization—routinely proposing the most expensive options to enrollees as their only treatment alternatives. In HMO settings, overtreatment occurs when a dental

others for their steering enrollees to a particular provider.

- Inappropriate use of benefits by a patient—A patient might, for example visit many dentists, claiming to be in pain, with the object of obtaining drug prescriptions.

Conclusion

Fraud in dentistry constitutes a crime against the public trust in our profession

The line between unbiased informed consent and biased steering to specific procedures that are more economically advantageous for the dentist, or where the dentist has other interests, is a clouded area.

staff member routinely proposes extensive non-covered procedures where covered procedures would meet the patient's oral health needs. There is a qualitative difference between this type of overtreatment and helping patients effectively manage their benefits.

- Under-utilization is a failure to offer to provide necessary care, especially in a capitation setting.
- Kick-backs are defined as receiving compensation from specialists or other healthcare providers in return for referring patients to them, undisclosed payments to unions, groups or

and it damages the trust in all health care professionals when it is exposed. Fraud has nine definable elements and one of the intents of this paper is to help dentists and their staffs avoid inadvertently committing fraud while trying to help patients manage their benefits. It is also prudent as a professional to be vigilant for fraudulent and abusive practices by patients or others in the health care community. The money expended fraudulently is part of the finite pool of dollars available for dental services. Fraud usurps the application of these funds from those in need.

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The Ethics of Roles

Jos VM Welie, MMedS, JD, PhD

Abstract

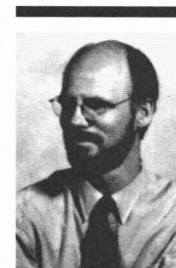
A distinction is made between ethical reasoning and moral behavior. Ethics courses in dental schools can aspire to improve the ability of students to reflect on ethical alternatives, but the most powerful influence for professional behavior comes from the role modeling of faculty members. The psycho-social, pedagogical, meta-ethical, and moral implications of faculty roles are examined. An example is given of how faculty assume this responsibility as they accept membership in the school community.

The German philosopher-ethicist Max Scheler (1874-1928) was once charged by one of his students: "Professor, you do not live up to

what you teach in class"—to which he supposedly replied: "Have you ever seen a road sign actually travel into the direction it points?" This distinction between teaching ethics and living a moral life is certainly defensible. After all, most pathologists are healthy rather than diseased. Nutritional theories are no less true when they are advanced by an obese consultant. The soundness of oral hygiene advice is not correlated to the amount of plaque on the hygienist's own dentition. From this perspective Max Scheler's response was quite to the point. I therefore remind my own students at the very beginning of their dental ethics course that a dental ethicist is not the same as an ethical dentist.

Or more precisely, I remind them that a dental ethicist is not the same as a moral dentist. Although the adjectives

"ethical" and "moral" etymologically mean the same thing ("moral" being the Latin translation of the Greek "ethical," meaning "concerning the habits or customs"), in class I insist that we reserve



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the term “moral” to refer to behavior and “ethical” to refer to the critical analysis of behavior. Even though we often say that a patient displays strange “psychological” characteristics, it would be more correct to say that the patient displays strange “psychic” or “mental” characteristics. After all, this patient is not engaged in psychology, the study of the mind. The same distinction between the study and the object of the study should

Why then teach dental ethics courses? Because the oral health care practitioner ever more frequently encounters moral dilemmas (at the chairside as well as in society at large) that are so complex that even the most honest and benevolent dentist can be at a loss. My hope is that the ethical insights and skills I teach will help them later in life to sort out such dilemmas and conclude to a morally sound course of action.

The oral health care practitioner ever more frequently encounters moral dilemmas (at the chairside as well as in society at large) that are so complex that even the most honest and benevolent dentist can be at a loss.

be made in the area of ethics. If we use the “psychology-psyche” distinction as our model, two possible pairs of terms present themselves: “ethology-ethic” or “morology-morality.” But as a matter of fact, we do not commonly use the term “ethology” (though it does exist). And the term “morology” means something quite different (namely, foolish talk; from the Greek *moros-legein*). Somewhat arbitrarily, I therefore use the “ethics-morality” distinction. Here, the term “ethics” refers to the critical study of morality, and especially the critical study of morality using philosophical methods of analysis and synthesis.

As a dental ethics instructor I obviously hope that my courses not only will make students wiser, but also more virtuous practitioners in the moral sense of that term. But this is not because I believe that the twenty hours I spend with my students will change their moral habits or convictions. My lectures are unlikely to convert a cheating student to become honest. Indeed, I have refused to let a student whom I had caught cheating, redo my ethics course by way of remediation. If she had not cheated, she would have easily passed. Thus the problem was not with her ethical competency, but with her moral character and repeating a course focused on ethical competencies made no sense.

The scholarly discipline of ethics, as I stated, is unable to convert immoral people into moral ones, at least not directly so. Maybe a student tempted to cheat on an exam will realize as a result of my lectures that cheating not only is immoral, but also a violation of professionalism, and hence a direct affront to the kind of practitioner he or she is trying to become. Maybe this realization will give the student the necessary courage to withstand the temptation and risk a lower grade. But that kind of indirect motivator to live honestly may easily be outdone by more direct motivators to the contrary, such as a cheating

The scholarly discipline of ethics, as I stated, is unable to convert immoral people into moral ones, at least not directly so.

habit acquired during college, peer pressure to succeed, or an excessively demanding institutional curriculum — not to mention a single observation of a clinical faculty member role-modeling dishonesty.

The latter examples also make clear that if a dental school sets itself as a goal to graduate competent dentists and hygienists who are practitioners of high

moral and professional standing as well, the school cannot simply rely on dental ethics courses or dental ethics faculty. Dental ethics courses contribute to this goal, but only in a very small way. The school will have to assess what kinds of direct and forceful motivators are in place that invite students to exhibit moral courage and professional virtues, and what kinds of motivators are in place that direct them to dishonesty and other vices.

Elsewhere, Van Dam and I have reflected on the requirement system as a potential negative motivator (2002). Here, I wish to reflect on the impact of role models, specifically the dental school faculty. There are at least four questions we can raise with regard to the role of role models: (1) What is the psycho-social significance of role models? (2) What is the pedagogical significance of role models? (3) What is the meta-ethical significance of role models? (4) What is the moral significance and impact of role models?

The Psycho-social Significance of Role Models

As pointed out earlier, observing senior faculty members provide—and get away with—a sloppy dental diagnosis or treatment, uncaring conversation with patients, or dishonesty towards students, is bound to have a significant impact on the moral maturation and the profes-

sionalization of most if not all dental students. Even if it increases some students' determination that they will definitely not follow in that faculty member's footsteps, it will at the same time render them more cynical about the professional ethos that allegedly is shared by all dentists. Conversely, seeing a faculty member successfully obtain a genuine informed consent from a very anx-

ious and upset patient; witnessing an instructor successfully negotiate with a demanding patient about unrealistic expectations; observing a senior clinician successfully diagnose and treat a severely demented patient—all can motivate the student to strive for ever higher moral ground.

Dental students tend to be very concrete thinkers, appreciating definite answers to practical questions. In general they dislike ambiguity, unresolved questions, abstract speculation (Chambers, 2001). Consequently, such practical examples exhibited by their own faculty members are bound to have greater impact on dental students than on students in mathematics or philosophy. It certainly is much greater than the impact of an ethics lecture on the distinction between deontological and consequentialist reasoning.

All of these evident examples raise the question how this process of “indoc-trination” by example occurs. Is there such a thing as a professional role in the world of dentistry? How is it sustained among any given generation of dentists and transferred to the next generation? What is its impact on the practice of dentists and the socio-political organization of dentistry? These are all extremely important questions for the field of dental ethics, but they are themselves not questions of dental ethics proper. The philosophical methods that characterize the discipline of dental ethics have little to offer towards a resolution of these kinds of questions. They are more properly the domain of moral sociology and moral psychology.

The Pedagogical Significance of Role Models

However, if we grant that roles have a major impact on the socio-political structure of dentistry and even more so on the moral maturation and professionalization of individual dentists, a second question arises: How can we best teach dental ethics. More precisely: What role should role models play in the design of a dental ethics curriculum? Many dental ethics course directors are well aware

of the fact that dental students tend to accept the authority of a DDS/DMD faculty member more easily than that of a PhD, JD, or EdD. Using clinicians as small group facilitators has evident draw-backs, particularly if these colleagues have themselves little training in ethics. But there is a lot to be gained from using them because of their exemplary status. The same is true of clinician

The school will have to assess what kinds of direct and forceful motivators are in place that invite students to exhibit moral courage and professional virtues, and what kinds of motivators are in place that direct them to dishonesty and other vices.

guest-speakers and clinician-panel members. Most course directors are equally aware of the educational value of idealized roles. A single short story or video clip about a dentist (whether real or fictional) who exhibited a particular ethical trait (whether good or evil) in an exemplary manner can have a greater educational impact than an in-depth and comprehensive theoretical lecture on the same virtue or vice.

The impact of clinical role models on the moral maturation of students can be fostered by making the phenomenon of learning-by-emulation explicit. Students can be instructed to watch for modeling behavior by others and to differentiate between good and bad models. In addition, students should be invited to become conscious about their own emulation of role models. What is it that attracts me to the behavior modeled by Dr. Doe? Have I unconsciously allowed myself to adopt behavioral patterns that are actually at odds with the ideals of professionalism and high moral standards?

But then again, these matters are not properly the domain of dental ethics proper, but of the pedagogy of dental ethics. They are the domain of educational experts rather than that of ethicists.

The Meta-ethical Significance of Role Models

If we once again grant the educational role of roles, the third question arises: What ethical lesson can we learn from this? Here, the adjective “ethical” is to be understood as I defined it earlier, that is, as “ethological,” as referring to the critical study of morality. What lesson does the educational significance of roles

teach the dental ethicist, not as policy maker, counselor, or educator, but precisely as ethicist?

Earlier, I maintained that I see it as my role as a dental ethics instructor to provide my students with some tools to independently resolve the many complex moral dilemmas they will encounter as dental practitioners. But is this a feasible goal? Some contemporary critics of so-called “applied ethics”—and many view dental ethics as a form of “applied ethics”—have argued that this is an unfeasible goal. Not because the behavior of dentists is determined by psycho-social forces greater than their ethical competencies. Not because the number of curricular hours devoted to dental ethics education tends to be far too small for students to gain the necessary ethical competencies. It is not feasible—so the objection holds—because it is theoretically impossible to solve particular ethical dilemmas using the methods of applied ethics.

This criticism is not new, except maybe as criticism. The very first systematic ethicist in western culture, Aristotle, already argued that ethical decision making is a matter of virtue, of the ability to discern, to weigh, to choose wisely. He made no attempt to design the kind of ethical calculus that would come to characterize the work of

utilitarian ethicists since the Enlightenment. He would be even more amazed by contemporary efforts to formulate principle-based resolutions for specific chairside dilemmas. When Aristotle, and his predecessors Plato and Socrates alike, invoked certain concrete examples, he was not showing how you can solve cases by applying ethical theory to them. The examples functioned as thought-experiments, as "idealized" situations and roles that should invoke reflection, and thereby increase discernment, prudence and wisdom.

Some contemporary critics of applied ethics have argued that ethicists cannot and should not strive to solve actual clinical cases. It is theoretically impossible and the ethicist is therefore likely to become a handmaiden of one or more of the interests at stake, be they political, financial, religious, or professional. Instead, the role of the ethicist is to retain a critical distance and try to interpret and understand moral experiences. To the extent that there is any applicability of ethics, these critics say, it will have to be indirect (i.e., when these reflections help people to craft the good life). The ethicist can only sketch patterns, styles, roles. It will be up to each individual to operationalize these ideals. How exactly you do that cannot be taught by a dental ethicist, but only modeled by exemplars, in our case, dental school faculty members.

Applied ethicists do run the risk of becoming moral engineers, manufacturing solutions for practical problems.

This critique of applied ethics is not easily countered. Applied ethicists do run the risk of becoming moral engineers, manufacturing solutions for practical problems. Elsewhere I have argued that there is nevertheless room for clinical application within the domain of ethics, provided the clinical ethicist limits his or her contributions to uncovering (rather than manufacturing) a solution (Welie, 1998).

The Moral Significance of Role Models

If we grant that faculty contribute by far the most to the moral education of our dental and hygiene students, our fourth question arises: What are the moral obligations of these faculty members, precisely as role models? When we hire faculty, grant tenure, and promote them,

A single short story or video clip about a dentist who exhibited a particular ethical trait can have a greater educational impact than an in-depth and comprehensive theoretical lecture on the same virtue or vice.

we tend not to consider their power as role models (whether positive or negative). We look at their disciplinary expertise, their ability to educate students in this particular discipline, their scholarly output, and their service record. Except in extreme cases when we are dealing with villains or saints, we do not consider their exemplary impact on the moral maturation and professionalization of their students.

Granted, it is very hard to quantify and measure that impact, certainly much harder than counting peer-review articles, hours taught, or the number of committees served on. We are worried that if we cannot quantify it, it may not be objective and hence discriminatory. There is

such a push in the academy towards diversity, respect for differences, and tolerance of the personal style, that any qualitative (as opposed to quantitative) faculty assessment is politically risky.

It seems to me, however, that dental school faculty by virtue of their accepting faculty status, also accept the moral requirements that come with this role, requirements that supersede individual

moral preferences. Let me draw an analogy with clinical dentistry. Clinical dentists not only are required to foster a fiduciary relationship between themselves and their own patients by virtue of their roles as dentists. As members of the profession of dentistry, they also foster the trust between all dentists and all patients in general. They have to accept

moral responsibility for the impact of their actions on the relationships between other dentists and their patients. Hence, they may not advertise their own practice in a manner that would foster distrust among patients in the work of other dentists. Hence, they cannot insist on treating patients in their own peculiar manner but must abide by treatment protocols (see the position paper of the American College of Dentists in this issue).

A painful reminder of the potential damage that can be done when dentists insist on their own idiosyncrasies was reported in the Reader's Digest cover story "How Dentists Rip Us Off" (Ecenbarger, 1997). Likewise dental school faculty must be willing to fulfill the ethical obligations that come with the particular role they have freely assumed.

As is true of students, faculty should be encouraged to self-consciously reflect on the roles they model. Role modeling of some sort occurs almost always when dental educators interact with their students. It is simply not possible to consciously structure all of one's interactions in view of their possible modeling impact. But a lot of quality improvement could probably be achieved if dental educators were to ask themselves by the end of each day: "What have I modeled for the students today? Did I exhibit behavior that students will emulate or that they will overlook?"

Role Related Responsibilities

The role of a dental educator will be determined by at least three factors: (1) The conclusions of empirical studies about the impact of faculty on the moral maturation and professionalization of students; (2) the specific mission of the vocation for which we are preparing the students—in our case, the specific mission of the professions of dentistry and dental hygiene; and (3) the particular institutional mission of the school that employs the faculty member and that is chosen by the student as his or her place of training. This is not the place to analyze each of these factors. I conclude with a single example drawn from my own academic home and its institutional mission.

vantaged and the oppressed” (Kolvenbach, 2001). As mentioned, this charge is to affect everything the dental school does, its curriculum, its research agenda, its service programs, its structures. But here we are only concerned with the role of faculty members, specifically in their interactions with students.

Any faculty member who decides to join the Creighton University School of Dentistry can be expected to “role-model” this commitment to the students. This is ever the more important since many of Creighton’s students do not belong to the very social stratum they are supposed to learn about and be an advocate for. Clinical faculty members hence have to help students become acquainted with the plight of the disad-

The specifics of the role model will differ for a faculty member at a Seventh-day Adventist school such as Loma Linda University School of Dentistry. It will differ yet again at Meharry Medical College School of Dentistry which by its mission is explicitly engaged in the health care of black patients and by African-American care givers. However, at each and every school, faculty members should be aware that their educational impact on students exceeds their lectures, their clinical acumen, and their scholarly output. What they consider to be their own philosophy of practice, their personal style, and even their private life, all become an educational force the moment they accept a faculty position at a dental school. They inevitably become role models for the students. Those of us who “profess” to be educators must accept the responsibilities that come with such a public promise. We must accept the role it entails and strive to embody it well.

All of this is done with the kind of eagerness that is characteristic of professional identity rather than optional charity.

Creighton University, and hence its School of Dentistry, is a Catholic and Jesuit university. In the words of Reverend Peter-Hans Kolvenbach, SJ, the present Superior General of the Society of Jesus, this professed identity demands a transformation of the goals, content, and methods at all levels of the university: Education, research, service as well as internal structures. It demands that the dental school educate students to be in solidarity with the real world, specifically the poor, vulnerable, and the marginalized. “They should learn to perceive, think, judge, choose, and act for the rights of others, especially the disad-

vantaged. This entails, for starters, providing dental treatment to disadvantaged patients. It entails genuine respect, that is, looking after those patients, which in turn means taking the time to discover the causes of their condition, their special needs, financial restraints, and ability to comply with different treatment options. It entails creative adjustment of standard interventions and discovery of alternative options. And most importantly, it demands that all of this is done with the kind of eagerness that is characteristic of professional identity rather than optional charity.

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The Value of Information

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

Abstract

The value of information is only indirectly a function of its objective characteristics. Of greater importance is its potential to add value to what its users can do. The dramatic recent reductions in the costs of distributing information have made protection against unwanted information more valuable than finding wanted information. This makes active information management a much prized skill. Suggestions are offered for reducing the costs of information search and for framing the search question at the correct level of specificity.

I cherish a view of myself as being reasonable and well-informed. But there is one commentator on public radio who annoys me so much I will switch stations minutes before his regular message. I refuse to listen (although I have investigated his background).

An open mind is overrated. Useful thoughts tend to fly out once you get going and it invites littering. "At least keep an open mind" is the weakest form of argument, used primarily by those who have no other point capable of getting your attention. The famous bumper sticker about open minds and parachutes seems to have had the bottom cut off—the part where we are reminded that

parachutes should be opened only under extreme circumstances.

The mind is an active power, customized to suit the demands of its individual owner. It has been tuned by a lifetime of experience, and, when functioning properly, it serves for effectiveness and growth in kinds of circumstances its principal user lives in, day in and day out. The mind manages information; it is not a passive dumping ground.

An open mind is overrated. Useful thoughts tend to fly out once you get going and it invites littering.

No Intrinsic Value for Information

In the early 1970s I thought the smartest man in business was Professor James March. He was a wizard in how organizations make decisions. As a junior faculty member in dental school I went to visit him at Stanford. He was very gracious with his time and I learned something very valuable.

We talked about consulting fees and he mentioned that he normally received several thousand dollars per hour. I think he saw in my face that the plan for my visit had failed. I knew our dental school could never afford his help. But then he smiled and said, "Sometimes I charge a little more and sometimes I charge a lot less. It all depends upon the

organization." He explained why he might charge a local YMCA a few hundred dollars for an entire project.

I said I thought it was nice of him to have a sliding scale depending upon an organization's ability to pay. But he rejected the idea of charity with some force. "A service organization could use my advice to make a few thousand dollars worth of improvements, if that. Exactly the same advice at General

Motors could be turned into millions." Professor March did not charge me for that lesson, but its valuable impact has been large and enduring.

The value of information depends primarily on who receives it rather than who gives it.

Allowing information to have as many values as it has users may seem counterintuitive. Materialists find this line of reasoning particularly disconcerting. In the "La-La-Land" of ideas this sort of fuzzy logic might hold, but for real things like forklifts and porterhouse steaks, value must certainly be concrete. Or is it? An excellent refrigerator is of practically no value in the barrios on the outskirts of Mexico City where there is no electricity. A good refrigerator is



probably a liability in a household that already has five of them.

Dentists tell me they are sometimes surprised by patients' assessments of the quality of care they receive. A restoration the dentist regards as typical might draw praise from one patient and criticism or even threats of suit from another. There are many sides to the growing problem of access to dental care in this country. But surely one of the greatest barriers to unraveling this issue is the different value different groups place on oral health. Many Americans act as though oral health is much less important than professionals do who provide it. This would almost certainly be the case whether under-served individuals received this care or not. It has not been helpful for individuals who propose policy for the underserved to substitute their values of oral health for the actual values of those who do not seek it.

What is information worth?

There is actually an established arithmetic for calculating what information is worth. It is a bit like the story of Archimedes. The king's golden crown had been sent for repair, but there was suspicion that parts had been replaced with alloys of less precious metal. The problem was, how to determine the gold content of the crown without damaging

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it. Archimedes knew the density of gold and the principal that objects displace other objects in proportion to their relative densities. A little fumbling around in the bathtub and "Eureka!" (The story is probably made up because no one recorded whether the crown was genuine or not.)

The rule for valuing information is that it is worth the difference between what can be accomplished with it and

what can be accomplished without it. Are specialists, with their additional training and higher levels of reading the literature, more effective in treating patients with applicable conditions than are general practitioners? Certainly they are, and a large part of the value added comes from information. Are practitioners who read every word of the instructions that accompany the new and improved version of dental materials

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they use every day in their practices more effective than those who do not? Here the answer is equivocal: this kind of information probably makes little difference in actual practice. Information is valuable precisely because it improves performance in things that people care about, not because of any intrinsic characteristic of the information itself.

For the sake of completeness, we must make one small correction in the formula for valuing information. From the difference in performance with and without information, we must subtract the cost of actually getting the information. It costs something in out of pocket expenses and opportunity costs to pur-

sue specialty training. But the difference in net income between specialists and general practitioners show that this investment is recovered in a matter of a few years, leaving the net value of advanced information about dental practice strongly on the positive side. Even though it costs virtually nothing to read the directions that accompany incrementally different dental materials, my suspicion is that it is done only when

results are noticeably disappointing. Cheap information is not necessarily useful information. In fact, the major challenge in the information age is to protect ourselves from the costs of information that has a negative net impact on performance.

Advertising, not just infomercials, has all the same general characteristics. It is information that has the potential for adding value to both those who pay

for its distribution and those who receive it. The laws of economics sort out the information that is valuable to the advertiser. (When the distribution of information results in greater sales than would be achieved without that distribution, advertising is of positive value to the advertiser and is continued. When the net financial impact is in the other direction, advertising stops.)

From the consumers' perspective, applicable laws include the First Amendment right to free speech and the American ethos that competition increases value for consumers. In the Bates-Osteen case, the U.S. Supreme Court struck down professional organizations' bans on advertising among their members largely on the grounds that such advertising has the potential for informing clients that value is available to them. In other words, advertising is assumed to have a net positive value when considered across society. False and misleading advertising does not have this characteristic and is expressly prohibited.

Advertising—unsolicited information that has a determined positive value to the advertiser and a potential positive value across a large group of consumers—has become a major national issue. The costs of advertising have dropped dramatically, raising the net worth on the side of advertisers. The national Do Not Call List, spam e-mail, junk mail, and professional calling



banks for fundraising have dramatically tipped the balance.

Most recently, a spam worm has hit one of my computers. I have been told that I can buy certain drugs discreetly, not by the company's large computer, which I could block, but by all of my friends who have my name in their address books thanks to their unsafe

propriate. So we give up effective practices in exchange for less useful ones.

As much as we would prefer to say that the problem of information value is one of "somebody" creating information of better value in the objective sense, this is unrealistic. Information of value to one practitioner is nonsense to another and potentially damaging to a third.

covering sound information and those who need the information in a ready format to get their work done.

The point is not to send everyone in the direction of his or her computer. Rather, this is one powerful example of how reducing the cost of a search can increase the value of information it reveals. Not to be overlooked is participation in organized dentistry. Anyone with a rich network of friends would be unwise not to use them when necessary. Even when you can think of no one who is likely to have the information you are looking for, perhaps someone you know knows someone who does. A few phone calls are often an inexpensive way of getting a valuable answer.

It is always necessary when using information resources, however, to remember to leave a tip. Passing on some personal information while making an inquiry or writing a personal thank you note after receiving the desired information ensures the richness and future value of your network.

I have always found that the ADA is a tremendous resource and I know they have invested in telephone training for their employees. Sometimes e-mail is used as an alternative to the phone because of our crowded schedules. The phone plus e-mail is better than either alone. Going to local component dinner meetings, state and regional conventions, and other gatherings of dentists is

The rule for valuing information is that it is worth the difference between what can be accomplished with it and what can be accomplished without it.

computing practices. As Davenport and Beck state in their book, *The Attention Economy*, the information challenge in this decade is no longer how to get more of it but how to protect ourselves from the information we do not want.

Managing Information: Lowering Search Costs

Acquiring new information can be classified into three categories based on value added. In the first category—successful information search—new productivity and satisfaction are increased by more than the cost of searching for and incorporating the new information that made these gains possible. Ineffective information search—the second category—results from botched efforts to make things better by gathering information. It costs more in these cases to gather information than can be recouped through use of the information. Information overload—the final alternative—occurs when information actually undermines the value of current performance. It is not simply that we are missing opportunities to take advantage of information that is becoming available, we are actually losing ground because of the costs associated with protecting ourselves from unwanted information that has virtually no probability of adding value, and because the information cannot properly be evaluated so that some of it is inaccurate and inap-

The value of information is almost entirely a function of how each individual manages it.

Surprisingly, perhaps the best way of adding value through information is by reducing the cost of information search. Many practitioners are vaguely aware that there is potential for various improvements in their practice but they are unfamiliar with means of comparing such alternatives. For them, the cost of getting information to improve their practices represents an insurmountable barrier, either locking them into the status quo or forcing them into a defensive strategy with regard to advertising. "How," for example a practitioner might ask, "could I evaluate the information on removal of asymptomatic third molars?

Cheap information is not necessarily useful information.

That literature is huge." The answer is www.health.nih.gov. That URL entered on any computer will lead to the summaries of randomized controlled trials on this topic from the peer-reviewed literature. This is exactly the scientific database that educators and researchers at the best universities would use in formulating their impressions.

The Internet is a powerful resource that levels many of the barriers between those who have devoted a lifetime to dis-

also an investment in a personal information gathering network that will lower the cost of finding information to improve practice.

If it is a good strategy to lower the cost of getting information you want, it should be equally useful to raise the cost of information you do not want. Signing up for the national Do Not Call List and unsubscribe from computerized junk mail are a given. Sophisticated computer users realize there are companies



using computers to monitor the searches each of us make. Amazon.com is only the most obvious example. When we order a book on natural childbirth, we are immediately told about other books that are similar. We will probably find ourselves on mailing lists for companies that make baby strollers as well. Experts recommend that we have two e-mail accounts: one for our personal and one for our private lives just as we have two phone accounts and give the number for one of them only to people we really want to hear from.

Mass marketing is inexpensive because it is not individualized. You can increase the cost to advertisers by insisting on customization. When the manufacturer's representative contacts you, insist that you will listen to only those presentations that have been thought out for your particular office. If they start out with "Our research shows..." or "All of your colleagues are buying..." stop them short and ask them to return when they have done an analysis of your office. Your front desk can help with this. You will have fewer representatives call, but you will have better relationships with the ones who do.

The information challenge in this decade is no longer how to get more of it but how to protect ourselves from the information we do not want.

Managing Information: Increasing the Payoff

The other key to adding value through information is in the way needed information is framed or received information is integrated into existing practice. Again, it is not the information that has value but its fit in improving practice.

My own MBA dissertation addressed this point. I surveyed department chairmen in dental schools across the country asking how much value they perceived in various kinds of information provided to them about teachers in their depart-

ments. Objective information was no more valuable than the same kinds of information framed as subjective opinion. Department chairs saw no greater value in information coming from faculty peers than they did in information attributed to students. The overriding determinant of perceived value to

The major challenge in the information age is to protect ourselves from the costs of information that has a negative net impact on performance.

department chairs was who else had the same information. If they were the only ones with the information and could use it as they saw fit, it had significant value. If others had the same information, its value dropped.

Experts on Internet computer searches advise us to avoid the extremes of over specificity and over generality. This is a matter of feel and fit, but there is wisdom in avoiding extremely focused searches. It has happened many times that one of my secretaries will leave notes saying that a certain individual has phoned me repeatedly and must speak to

may seem like a productive search question because it is precise. A better question would be what material is most effective for the kinds of patients I'm treating?

Busy professionals are increasingly calling for nuggets of insight that reduce the amount of time required to

gain new information. As information technology becomes more sophisticated, it will be possible to provide access to such nuggets, customized to the needs of different practitioners. Isolated facts may be dangerous. There is wisdom in a strategy of generally scanning the environment for new information. "Well read" individuals are seldom those who narrow what they read. There is a famous study in social psychology that analyzed the contacts individuals used in finding new jobs. Those who used formal sources and cold contacts did poorly, as did those who relied on their close friends. The most successful in finding new career opportunities were those who used acquaintances (neither friends nor strangers). The middle ground between precision and generality in searching for new information is a sound strategy.

Because the value of information is determined so heavily by the values of information seekers, all answers are not equal. Even among factually accurate information, we have our preferences on what is believable. The same statement from Dr. John Doe is more believable than it is from John Doe, and considerably more believable than it is coming from Jane Doe. In addition to such external markers of believability, information has value depending upon whether it confirms or challenges our pre-existing ideas. Our natural protective nature makes it easier to hear that we are a success than we are a failure. It



is also easier to hear that a small change easily made will dramatically improve a dental practice than it is to hear that hard work is necessary.

What makes information “hearable” is generally well understood by advertisers, continuing education gurus, and others who seek our money but must go through the door of our intentions. Not only do our preconceptions about what constitutes an acceptable answer influence our readiness to hear various proposals, they also heavily influence the direction in which we seek new information. We tend to look for information

where we think it is inexpensive to do so, and we look in those places that are most likely to give us the answers we hope to receive.

information. Second, we should frame our searches to consider the range from focused to general sources. Otherwise, someone else will determine the infor-

The middle ground between precision and generality in searching for new information is a sound strategy.

A better strategy for seeking information that will add value to practice requires two approaches. First, we should invest in learning the skills that will reduce the costs of finding useful

information available to us. No one would leave his or her office front door open at all hours. In just the same way, our minds should be managed, not indiscriminately open.



Recommended Reading

Colombotos, J. L. (1989). Information transfer in dentistry: dilemmas and contradictions. *Journal of the American College of Dentists*, 56, 54-58.

Eighth Dunning Memorial Lecture at Columbia Dental School devoted to diffusion of information among dentists. Fear of errors among health professionals causes a defensive attitude toward information. Physicians (whom Colombotos studied) prefer personal sources of information to public ones such as the literature because it is more open to interpretation.

* Davenport, Thomas H. and Beck, John C. (2001). *The Attention Economy: Understanding the New Currency of Business*. Boston, MA: Harvard Business School Press. ISBN: 1-57851-871-7; 255 pages; about \$17.

The explosion of information in circulation has created a shortage of attention available to be paid to it. This book is about the economic value of attention and how to get attention from others and protect and manage your own attention. In future, we will be paid for paying attention.

* Festinger, Leon. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press. No ISBN; 292 pages; out of print.

While an individual is making choices, they are in conflict as each alternative and its attendant uncertainty is weighed. Festinger's concern is what happens after choice takes place. The tension between alternatives that remain after decisions are made or opinions are formed is called dissonance. Dissonance has the power to motivate individuals seeking the kind of information that will reduce this tension. The book describes theories and presents experimental evidence about how individuals behave after making a decision, when they are forced to act contrary to their beliefs, when they are exposed to contrary information, and when they are part of a group whose beliefs are not confirmed by events.

March, James, G. (1994). *A Primer on Decision Making: How Decisions Happen*. New York, NY: The Free Press.

Rational decision making is untypical. More generally, information is limited, mental capacity is compromised by emotions or time pressure, and multiple parties have different framings of the issue. March works out ways in which, given these constraints, decision making is often simply rule-following, ambiguity is exploited, decision is more interpretation than commitment to action, and decisions tend to "make themselves."

Rogers, Everett M. (1995). *Diffusion of Innovations (4th ed.)*. New York, NY: The Free Press. ISBN 0-02-926671-8; 520 pp; about \$33.

The dean of innovation studies summarizes his own work and the accomplishments of the whole field over the past sixty years in a comprehensive and straightforward book. It is large and comprehensive, with 864 references in the bibliography. He argues that the adoption of innovations goes through predictable stages and the extent of adoption is dependent on characteristics of the innovation and characteristics of the adaptor community, as well as diffusion strategies such as the use of media, opinion leaders, etc. (An innovation is defined as an idea, practice, or object that is perceived as new by an individual or another unit of adoption (xvii). Innovation is a social process. The text is filled with rich case studies.

* Schlein, Alan M. (2002). *Finding It Online: The Complete Guide to Online Research*. Tempe, AZ: Facts on Demand Press. ISBN 1-889150-29-0; 544 pages; about \$20.

Accessible book that demystifies the Internet. A strong case is made that all internet communication is two-way. Search sites are created by "crawlers"—computer programs that search the net and retrieve and organize material. Your use of the Internet could very well be a fact that is of interest to other users. Complete chapters on government, public records, news, business, international, free and fee sources. Help with search strategies and privacy issues.

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 referenced in fifteen minutes rather than five hours. Summaries are available from the ACD Executive Offices in Gaithersburg. A donation to the ACD Foundation of \$15 is suggested for the set of summaries on the value of information; a donation of \$50 would bring you summaries for all the 2003 leadership topics.

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