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

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

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Cover Photograph: A dentist's office in Taiwan. ©2007 Dr. Vania Ng

FROM THE EDITOR

HOME RUNS AND ETHICS

There are almost no life-and-death issues in dentistry; and there are no endowed chairs in dental ethics either.

Barry Bonds is now the home run king, and his achievement raises some ethical issues. My son and I were at Pac Bell Park when Bonds blasted the one just shy of tying the record. It was the bottom of the first inning. I had just completed the loan arrangements to purchase a chili dog and some garlic fries for us. We sat down for ten seconds and wham, it was outa here. The crowd showed some appreciation, but the Giants media outfit was all over it: music, pyrotechnic big screen displays, and a testimonial and best wishes from somebody famous. And then we went on with the game.

It is not the asterisk thing about possible steroid use that troubles me; it is the fact that the Giants are in last place. They are so far behind every other team that they seem confused about where they should be going. And they have been this way for the past several years as Bonds pursued his destiny. Management has let the little things go in its obsession with the grand gesture that will get the headlines.

And so it is with ethics, including the ethics of oral health care. The media has recently gotten hold of some cheating scandals in dental schools. But these kinds of efforts to get credit beyond one's due by misrepresentation have been going on for as long as there have been dental schools; and much longer than that in dentistry. On the other side of street, dentistry has kept those who hold

endowed chairs in dental ethics out of the discussions of life-and-death issues that bring occasional public prominence to medicine. There are almost no life-and-death issues in dentistry; and there are no endowed chairs in dental ethics either.

Does all of this mean that dentistry is off the hook for ethical matters? Hardly. It means we are looking in the wrong places. There are other ways to win (or lose) a ball game than waiting for the star to hit a home run (or not). Suite J, 839 Quince Orchard Boulevard and 211 East Chicago Avenue have important roles to play, but the battle for ethics in dentistry is almost entirely being won and lost in individual dental offices.

Big ethics discussions (or more properly, big jurisprudence) on how oral healthcare is distributed is being watched from time to time in the media by dentists who everyday in particular cases and in their general office policies allocate this precious resource to actual people. There is a little sour grapes about somebody else letting down the high standards of the profession. We have national conferences to review how just the sanctions might be for ten students who misrepresented the completeness of some of their patient records while state boards lack the resources to even sample the great range of actual record-keeping practices in dental offices. One big case of insurance fraud gets attention in *The Wall Street Journal*; but daily cases of "shading the report" are likely to be unrecognized, especially by those doing the shading. Standing orders for radiographs, including for patients who

have not yet seen the dentist, is a policy of malpractice entirely unmentioned on, but if a consensus conference on such a policy were called, it might warrant a paragraph in dental publications.

My son explained this to me. “You see,” he pointed out, “the Giants don’t play small ball.” That being a new concept, I had to learn about it. The best way to win baseball games, I find out, is to exploit the most realistic potential in each situation, even if it is as small as a bunt to advance a runner one base or a sacrifice long fly to score that runner from second base. Always going for the big play or for nothing builds up the large egos but not the overall good. My son informs me that the Giants hold some sort of record for leaving the most men on base at the end of innings.

Now we can see how Barry Bonds and the media have cheapened baseball. They overlook the team of regular players in hopes of making the big splash. Small ball is depreciated. The same things happen in the ethics of dentistry. We need more discussion, more guidance, more support, and more recognition for every dentist who is one ethical act better today than he or she was the day before.

It may be worthwhile to reread our Aesop, in particular the story of the fox (the clever one) and the grapes. “A fox, who was so hungry he would have eaten an old shoe if he could have found one, saw some perfect, sweet, ripe grapes hanging up on a trellis too high for him to reach. He jumped at them and

snapped, jumped and snapped, until he was so worn out he couldn’t move a paw and he still couldn’t get them. ‘Pooh for those sour green old grapes,’ said he, ‘anybody can have those. I wouldn’t eat them if someone handed them to me on a platter.’”

American media have created a climate where only the sensational, aberrant, and operatic are worthy of attention. (Consider the coverage of school shootings. Gun violence in schools is actually on the decline and thousands of college students die each year from binge drinking—both unmentioned on.) In such an environment, dentists might be excused from taking an ethical audit of their practices to discover the small choices that define the moral culture of their work. Don’t be fooled. It is the annual checkup that finds the insidious, slow-moving cancer and the skipped bowl of ice cream that reduces the chances of a heart attack. It is small ethics that constitute the foundation of the dental profession.

Despite the myth of dentists being independent, many appear reluctant to act on private moral standards. Actually, no one needs permission from a sponsoring group to do what is right.



DENTAL EDUCATION AND DENTISTRY IN EUROPE

Diarmuid B. Shanley, FDS, MSD,
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ABSTRACT

This paper provides a perspective on the evolution of dental education in Europe and in particular the European Union. It outlines the main differences in dentistry and dental education throughout the continent. For ease of reference, what follows is set out under these headings: The development and impact of the European Union, some historical perspectives on the evolution of dental education in Europe, the DentEd project and its influence on convergence towards higher standards in the EU, and organization of dentistry and oral health care services in Northern Europe.

The continent of Europe covers four million square miles, 6.7% of the world's land mass. It has a population 729 million people, representing just over 11% of the global population of 6.5 billion people. It comprises 47 countries with different languages, culture, values, and religious beliefs. It has been a center of civilization, science, cultures, and art; reflecting a compilation of both congruent and incongruent values. It was the source of major colonial powers that spread European languages, religions, and cultures throughout the world. Within Europe, nationalism and aspirations to dominate others embroiled the continent for thousands of years in a cauldron of conflict; in the last century it was the source of two world wars. In an effort to eliminate conflict that stretched over many millennia, one of the most important geopolitical and social experiments in the history of humankind created of the European Union (EU). The community now embraces 27 of the 47 countries of Europe.

In respect of dentistry, as for other professions, this facilitated the free movement of dentists across international boundaries in the EU. It seems paradoxical that, in the United States, movement between states for a dentist and other professionals is restricted, despite sophisticated and well-tried national accreditation systems. On the other hand, no such restrictions apply to movement of professionals between the 27 countries of the EU; despite the fact

that there are enormous differences in the methods, structures, and quality of dental education and training between the countries.

DEVELOPMENT AND IMPACT OF THE EUROPEAN UNION

The European Union is a family of democracies now dedicated to a fair and caring society as well as peace and prosperity while sharing and defending core values of democracy, freedom, and social justice. It fosters cooperation between the peoples of Europe; promoting unity while preserving diversity. The EU is not a state intended to replace existing ones, nor is it simply an organization just for international cooperation. Its member states have established common institutions to which are delegated some of their former sovereignty so that decisions on specific matters of common interest can be made at a European level. After World War II the United States magnanimously adopted the free trade Marshall Plan which facilitated significant and fundamental economic recovery in Western Europe. This in turn paved the way for growing unity within Europe. Strategically for the U. S., that impeded the extension of communism.

All twenty-seven countries now in the EU had widely divergent healthcare systems, greatly influenced by the



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resources available within each country. This is especially true when considering differences between the original and more recent member states of the EU.

Evolution of Dental Education in Europe

Some historical perspectives on the evolution of dental education in Europe may provide useful context. Dentistry evolved from the barber surgeons, and the links with medicine continue to this day in most European countries (Ring, 1985). The origins of modern dentistry are attributed to the French surgeon Pierre Fauchard. His book was regarded as the base from which dentistry developed as a science and healthcare discipline.

European dental education originated from two main methods of training (Banoczy, 1999). On one side of the spectrum was odontology, which is dental education independent of medicine. This model is typical of Northern and Western Europe and is similar to models in the United States and Canada; except that it is an undergraduate rather than a doctoral program. On the other side of the spectrum is stomatology—a specialty of medicine. Stomatology students complete a full or partial medical degree (mainly theoretical) and later study dentistry as a sub-specialty of medicine. This model was predominant in Central and Eastern European countries and continues to be the model in the Russian Federation and China. As a generalization, in northern, western, and some central European countries, the outcomes of dental education are not dissimilar to

those in North America, Australia, and New Zealand, although there are differences in emphases on levels of competence in different disciplines. In the more eastern countries new graduates have more experience in oral surgical procedures, but there can be significant variations, especially in restorative dentistry, in standards within and between countries.

Dentistry is designated as an independent profession within the EU. However, in many universities it is frequently part of a medical faculty in the university hierarchical structure. For cost efficiencies and integration reasons, dental students often take a modified version of the first and second years of medicine. These years are generally devoted to the biomedical sciences of anatomy and physiology and some of the paraclinical medical subjects such as microbiology, pharmacology, and immunology. In Northern, Western and some Central European countries, some basic sciences and biomedical courses are especially designed for dental students. In many schools basic and biomedical courses have not been sufficiently tailored for dental and stomatological students. This results in excessive and irrelevant detail in biomedical sciences, with insufficient emphasis on bio-dental sciences as well as reducing the time available for gaining competence in clinical dentistry.

A small number of schools have introduced student-centered, self-directed learning, such as those with problem-based learning methods. Here, structured

The European Economic Community

The EEC was established in 1957 through the Treaties of Rome by six founding countries; Belgium, France, Germany, Italy, Luxembourg, and the Netherlands. This evolved from a purely economic arrangement to a broader European Union with the addition of twenty-one additional countries:

1972: Denmark, Ireland, and the United Kingdom

1979: Greece, Spain, and Portugal

1995: Austria, Finland, and Sweden.

2004: Cyprus, Czech Republic*, Estonia*, Hungary*, Latvia*, Lithuania*, Malta, Poland*, Slovakia*, and Slovenia*.

2007: Bulgaria* and Romania*

The European Free Trade Association (EFTA) included EU member states, plus Iceland, Norway, and Switzerland, who have chosen not to become full members of the EU.

* Former Eastern Bloc Countries.

The introduction of twelve former Eastern Bloc countries, where stomatology was the predominant model of education, created anxieties about freedom of movement of dentists with concerns about differences in standards and emphasis.

problems have been designed to ensure that students pursue relevant sources of information in order to acquire an appropriate and integrated understanding of essential material while learning to apply new evidence-based knowledge; thereby developing skills in information retrieval and its prioritization.

DENTEd PROJECT

In order to facilitate the free movement of professionals within the European Union, broad guidelines (the *Dental Directive*), prepared by The Advisory Committee on the Training of Dental Practitioners, were introduced in 1978. These were intended to ensure comparable levels of education and training. The *Dental Directive* was supplemented by the recommended *Profile of the European Dentist* in 1986. There was no reference to clinical competences in these documents.

A self-assessment questionnaire circulated to European schools revealed serious deficiencies in the application of the directives and illustrated enormous variations in interpretation (Shanley et al, 1997). The study concluded that the Dental Directives of the European Union had little influence on ensuring comparability of basic educational and training standards in dentistry in the European Union. The Advisory Committee funded a pilot study of visits to three well-established dental schools in Denmark, Germany, and Portugal. This study illustrated the unreliability of self-assessment and how ineffective the Dental Directives were in assuring acceptable standards of training. In order to address these shortcomings, the Advisory Committee devised a set of clinical competences as an annexure to the Dental Directives. These were accompanied by a set of recommendations on essential core

knowledge in the basic, biological, and medical sciences (Advisory Committee on the Training of Dental Practitioners, 1993; 1997).

The European Commission was reluctant to introduce legislation or formal accreditation systems because of the complexity of healthcare delivery systems across Europe, with different and legitimate priorities and enormous differences in respect of available finance in the member states. The introduction of twelve former Eastern Bloc countries, where stomatology was the predominant model of education, created anxieties about freedom of movement of dentists with concerns about differences in standards and emphasis. The DentEd Thematic Network was devised to facilitate a voluntary system to promote better understanding, collaboration, and use international peer influence in order to advance convergence towards higher standards in dental education throughout the continent.

DentEd arranged visits to almost half of the dental schools in the member states as well as schools in the central and eastern parts of Europe on a voluntary basis. Teams of six visitors were led by wise and experienced educators together with younger academics and practitioners. The visits were not formal accreditation or inspection exercises. Each school prepared a self-assessment report for discussion with the international visitors. The findings from the visits were analyzed and published in 2001 (Shanley, et al). More information is available on the DentEd Web site (www.dented.org), where all details of the project, the visit protocol, and school reports may be found. The information gained revealed how human ingenuity overcame deficiencies and how close standards were in the essential core competences. There were also some disturbing revelations. The DentEd process won interest from North America and Southeast Asia and

subsequently resulted in three Global Congresses in Dental Education in Prague (2001), Singapore (2003), and Ireland (2007). These provided a forum for open discussion, sharing of experiences, and furthering the process of convergence.

Arising from the DentEd initiative, a profile for the European dentist was discussed in Dresden in 2002 (Shanley, 2002). This led to the third and final phase of the thematic project (DentEd III). The *Profile of the European Dentist* was presented to and approved by the Association for Dental Education in Europe (ADEE). Such a profile might have broader application in the industrialized world and would promote better understanding in adopting common outcomes. The DentEd project was merged with the ADEE in 2007. The final phase of DentEd III set up task forces to report on curriculum structure, a European credit transfer system, and quality assurance. These are now available on the DentEd III Web site at www.dentedevolves.php3.org. The final phase included discussion with registration authorities throughout Europe as part of the effort to promote higher standards (Plasschaert et al, 2005). DentEd had a significant influence on the International Federation of Dental Educators and Associations (IFDEA), which launched a global network on dental education in September 2007 (www.ifdea.org).

ORGANIZATION OF DENTISTRY AND ORAL HEALTHCARE SERVICES IN NORTHERN EUROPE

There are significant differences in the organization of dentistry and delivery of oral health care across Europe. Standards of training, professional ethics, and jurisprudence are generally regulated by a registration or licensing authority appointed by the member state. The role of the profession can vary from a model

of self-regulation to one of state control with the assistance of the profession. The regulatory or “competent” authority also has the power to place sanctions on a dentist found guilty of misconduct and erasure from the register. All EU countries comply with EU regulations.

The delivery of oral care services also varies considerably across Europe, from the most advanced care in the metropolitan centers to neglect in the more remote districts and a wide spectrum covered between these extremes. Rather than attempting to provide a composite picture, it might be useful to cite some examples of the more developed systems. The four selected are Sweden, United Kingdom, The Netherlands, and Germany.

SWEDEN

Sweden is a good example of the Nordic part of Europe. It is generally recognized that the highest standards of care and ethical awareness of community needs are practiced in this part of Europe. About 85% of healthcare costs in Sweden are covered by the state and responsibility is spread over almost 300 municipalities or counties. Over 8% of the gross domestic product is invested in health care, and this reflects the level of healthcare investment of the other Nordic countries, Norway, Denmark, and Finland. Sweden has a dentist-to-patient ratio of about 1:700, one of the most favorable in the world.

Renowned for its emphasis on primary care and prevention, in the 1960s Sweden made a greater investment in specialist or secondary care services. Oral health care is provided in one of two ways. There is a free public health dental service (NDS) available to those under nineteen years of age in local public clinics. Parents and their children can also opt to attend private dentists. Adults

who are not entitled to attend the public clinics for free dental care are subsidized by the state for dental treatment from private dentists. Over 80% of the population of Sweden avails itself of dental care in any two-year period. Private dentists set their own fees, but the state subsidy is fixed. All kinds of dental treatments are covered by private insurance. For more detailed information the reader is referred to the informative Swedish Dental Association Web site at www.whocollab.od.mah.se/euro/sweden/data/dentistry_03.pdf.

UNITED KINGDOM

Perhaps the most frequently cited state system is the United Kingdom's National Health System (NHS), established almost sixty years ago. On 1 April 2006, significant reforms to NHS dentistry were introduced. These benefit patients by improving access to NHS dental services and by replacing the old, complicated charging system with three simple, standard price bands. This makes it easier to know how much patients may need to pay and also helps ensure that they are being charged for NHS care (rather than private care). The maximum charge for a complex course of treatment is £194. Most courses of treatment cost £15.90 or £43.60 (At the time of writing, £1 Sterling equals about US\$2). The NHS attempts to prioritize health care services for those most in need. More information can be found on the NHS Web site on dentistry (www.nhs.uk/England/dentists/dentalcharges.cmsx).

It is not surprising that in the former communist countries private care of patients is an aspiration for many newly qualified dentists.

THE NETHERLANDS

The Netherlands has a reputation for high standards of dental care. Their system is based on private practice. However, the price of dental treatment is determined by the Dutch government. Every dentist in the Netherlands is obligated to charge agreed fees and abide by the state's codes set for dentistry. Every possible form of treatment that can be performed by a dentist is designated by a uniform code, which is also used by the healthcare insurer. In 2006, a basic public health insurance scheme was introduced for every Dutch national, scrapping the dual private/public insurance system. All contemporary dental care specialty services are available in the Netherlands. (See www.tandarts.nl.)

GERMANY

In Germany, dental care is provided by private practitioners and is embedded in the national social system (Holm-Pedersen et al, 2005; Nitschke, 2000). About 90% of all German citizens belong to the national insurance system. A fee paid in equal

parts by the employer and the employee finances the health insurance system.

These are just four brief examples of state involvement in dental care services in Europe. There is a stronger emphasis on community-funded, primary-care services than in North America. Fees vary enormously. In low-income countries there is a growing chasm in levels of care available. It is not surprising that in the former communist countries private care of patients is an aspiration for many newly qualified dentists.

Excellence is a broader concept than individual or expensive care if it is truly a health-caring discipline where priorities must focus on those most in need; the young, the medically compromised, and the most vulnerable in society.

Oral health is an integral part of general health. Dentistry as a healthcare discipline must be considered in the context of overall health priorities and address the underlying vectors of diseases and their more serious consequences (Sachs, 2003). On a global basis, the greatest challenges to health and well-being are poverty, deprivation, and inequality. Nelson Mandela said that "While poverty exists there is no true freedom." As we define excellence in global dental/oral health care we must not lose sight of those most in need of basic care and probably unlikely to have access to a dentist. ■

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ITALIAN DENTISTRY IN TRANSITION

Luigi Gallo, DDS, MSD

ABSTRACT

Dentistry in Italy is moving toward models of education and practice that resemble those in Northern Europe and North America. This process will be accelerated by reforms in dental education and stronger standards of practice.

Oral health care in Italy exhibits some of the conflicting elements of a country in transition.

Several delivery systems exist side by side, the range of care provided is large and sometimes not completely standardized, and dental education is in transition from a medical to a surgical model. In order to understand the complexity of Italian dentistry, it is necessary to recognize the closer connection between dentistry and politics that exists in Italy than in countries such as the United States.

As is true in most of the world, standards in dentistry are influenced by three organizations. The schools provide fundamental training and establish the first set of professional standards for practitioners. Licensure for dentists is maintained in Italy by the Order of Dentists and is based on review of credentials and an initial examination. The professional association ANDI, National Association of Italian Dentists, resembles the American Dental Association in membership and in its activities.

But there is a fourth party, the government, that plays a role as well. The government sets standards for compulsory continuing education and other requirements for maintaining the dental license. It also funds the delivery system for oral health care for low income patients, including both clinics and hospitals. This differs from some countries where governments provide funding subsidies for economically disadvantaged individuals to use the existing oral healthcare system. As a

result, the range of quality and the services provided to patients is larger in Italy than it might be in other countries.

Because dental schools in Italy are regulated by the government, rather than an independent agency such as the Commission on Dental Accreditation in the United States, there is some governmental influence over dental education. Some faculty members or administrators are political appointees.

At present, there is overlap and uncertainty regarding aspects of the curriculum in dental schools because Italy is undergoing a change from the stomatological to the odontological model of dental education. Traditionally, dentistry has been regarded as a specialty of medicine. This is reflected in the heavy emphasis on medical subjects in dental education. Education has also been dominated by theoretical teaching, with many lectures and a small amount of practical clinical training. A limitation on clinical training comes from the shortage of chairs in dental school clinics. The stomatological model assumes that graduates will continue to develop their clinical skills on their own. Often this is



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Approximately 50,000 individuals practice dentistry in Italy; of these about 15,000 are physicians.

done in government clinics and hospitals; sometimes it is accomplished by practitioners seeking formal advanced training in other countries or informal training by associating with a well-known practitioner.

Approximately 50,000 individuals practice dentistry in Italy; of these about 15,000 are physicians. Of the federal registry of physician surgeons and dentists, 10,000 do not identify themselves on their tax returns as dentists who do not work in dental offices or clinics, but are more closely identified with the practice of general medicine.

There are no formal, recognized dental specialties in Italy. A number of dentists pursue advanced training in areas such as endodontics or periodontics outside the country. Others focus their continuing education or apprenticeship to practitioners who have limited their practices. In this way, specialty practices have emerged informally and their quality is dependent on the character and training of individual dentists.

Provision of dental care varies. In larger cities such as Rome and Milan, there may be as many as one dentist for every six hundred individuals; in rural areas, the ratio is less favorable. The cities are also more likely to support a full range of practitioners with more advanced training.

There are four basic paths for providing care. Patients may attend a private practice with a dentist with whom they have developed a long-term relationship. Alternatively, they may go to a dental associate's office. The third option is to use dental clinics. A fair number of patients receive care in hospitals, a path that is accompanied by long waiting times. In this setting, patients pay only a small, set fee regardless of the work performed.

Most care is paid directly by patients, although there is some limited-coverage insurance. Direct reimbursement—where companies contract directly with dentists for care at set fees—does occur in Italy.

Dentistry is in transition in Italy today. The surgical model, with high levels of training and professionally supported standards of quality, is being developed. If the government were able to provide more economic support and less political regulation, the transition would occur more quickly. ■

ORAL HEALTH CARE SYSTEM IN CHINESE MAINLAND

H. C. Lin, BDS, MDS, PhD;
Y. Zhang, BDS

ABSTRACT

The purpose of this review is to describe the training of dental professionals and to give an overview of the oral health care system in Mainland China. It may be of interest and importance for American readers to become aware that there are alternative practice structures and the world is getting smaller.

In 1979 China started to reform and implement a political-economic “open door policy.” The GDP of the Chinese Mainland had quickly increased by 9.6% per year from 1979 to 2004, and more than 10% in the past five years. The GDP of the Chinese Mainland was 209,000 billion RMB Yuans in 2006. Yearly average income per person on the Chinese Mainland was US\$1,745—around one-thirtieth of the income of residents of USA in 2006. Along with the development of the economy, the demand for oral health care and dental manpower on the Chinese Mainland has been going up as is to be expected with such economic development. It is predicted that the economy of China will continuously and quickly increase in the coming ten years.

TRAINING OF DENTAL PERSONNEL AND LICENSURE

Dental personnel in Mainland China include stomatologists (dentists), assistant dentists, dental nurses, and dental technicians. Dentists usually graduate from a university and have the bachelor's degree after five years of study (preceded by six years at primary school and six years at secondary school). In 2003, there were fifty universities, which provided such training of dentists comprising three years in the study of general medical courses, one year each in the study of theoretical and experimental courses of dentistry, and one year in practice in dental hospitals. One year after graduation and following

work under the supervision of a certified dentist, the graduates can attend a yearly special examination and those who pass the examination receive a certificate of qualification issued by the health authorities. After earning the qualification, they need to register as dentists at a specific hospital or clinic with local health authorities to practice independently.

Current educational programs in dentistry also include the program for assistant dentists. Such programs provide a three-year course (preceded by twelve years of education). In this article we call it the “post-secondary-no-degree” level. There are about forty-five such schools registered with the National Education Committee or with various provincial Departments of Public Health that provide such training for them. To become a certified assistant dentist, graduates also need to attend a special examination one year after graduation. The certified assistant dentists should practice under the supervision of certified dentists, but they can work independently in rural towns and villages. Certified assistant dentists with the educational background described above



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can also attend the special test for certified dentists after two years of practice as an assistant dentist under the supervision of certified dentists. But the percentage passing this test is around 50%—lower than the 80% of those candidates with bachelor's degrees.

In Mainland China, medicine and dentistry are practiced under the same law. According to the law for certified doctors/dentists of the country, health authorities at the county or higher level governments should regularly organize assessments for the professional level and ethics of certified dentists and can suspend the practice of those who are not practicing at the standard of care for periods of three to six months. A second assessment will be performed afterward, and the registration will be cancelled and the certificate be taken back if practiced is still not at an acceptable level. However, such cases are rare. The dentists/doctors whose qualification are cancelled usually are due to treatment accidents causing severe injury to patients.

Few schools provide special training for dental surgery assistants and dental hygienists. Dentists are assisted by dental nurses in their clinical work. Nurses usually receive three years training in a health worker training school after they finish lower secondary school education. When they work in dental hospitals or clinics, they receive a short period of training before they start work as dental nurses. Most private dental clinics have no dental nurses. Some schools have training programs for dental technicians

and the length of schooling usually is three years.

DENTAL MANPOWER AND ORAL HEALTH CARE SYSTEM

In 2002, the number of certificated dentists was 50,920 and the number of certificated assistant dentists was 5,318. The ratio of certificated dentists to population was around 1:25,000 in 2002. This ratio varies considerably in different parts of China. For example, it was 1:6,868 in Beijing and 1:76,587 in Guizhou Province. Even in the same province, the distribution of dentists is imbalanced in different administration areas and in urban and rural areas. These patterns relate closely to the economy status.

Almost all the dental hospitals and dental clinics in general hospitals belong to and receive support from the government. The number of dental hospitals in Mainland China was eighty-nine in 2000 and increased dramatically to be almost two hundred a year later. The number of private dental clinics in Mainland China has increased quickly in recent years. No exact number is available, however. This quick increase has occurred principally in the urban areas. China is a large country and different areas have different speed of economic development and different developing demand for private dental clinics. An example of a quickly developing city is Beijing, where the number of private dental clinics was about 350 in 2001 and 1,600 in 2004. About 20% of dentists work in private dental clinics and it is predicted that this proportion will increased in the future.

Utilization of dental services is still low in Mainland China. According to the unpublished results of a national oral health survey organized by the Ministry of Health and conducted in 2005, proportions of the study subjects who reported having visited a dentist during

the previous twelve months were 20.5% for five-year olds, 27.1% for twelve-year-olds, 18.3% for individuals thirty-five to forty-four years of age, and 23.0% for those sixty-five and older living in urban areas. The corresponding proportions for rural residents were 9.2%, 14.4%, 13.8%, and 15.2%, respectively. The percentages of the different types of hospitals/clinics they visited, i.e. dental hospital, general hospital with dental clinic, town or community infirmary, or private dental clinic were 13.7%, 28%, 21.4%, and 35.5% respectively for thirty-five to forty-four-year olds, and 10.1%, 25.1%, 21.9%, and 38.8% for those sixty-five and older.

Medical insurance usually covers basic dental health care in Mainland China, including fillings and tooth extractions, but not orthodontics and dental prosthesis. In 2006, there were 157.4 million residents of cities or urban towns who enjoyed "basic medical insurance for urban residents." Although most of the 500 million farmers have attended "new-type rural cooperative medical insurance," the money that can be used for outpatients is very limited. The percentage of expenditure for public health to GDP is less than 3% in Mainland China, compared to more than 10% in developed countries and about 8% in Brazil and 6% in India. About 60% of expenditures on medical and dental treatment is paid by the patients themselves in Mainland China.

DENTAL PROFESSIONAL ORGANIZATIONS

There are several national dental professional organizations in Mainland China. They include the Chinese Stomatological Association (CSA), the Chinese Stomatological Doctor Association (CSDA), and the Chinese Division of

International Association for Dental Research. Most of the provinces also have their respective provincial stomatological associations. CSA is an academic organization. It was founded in 1996 and its former name was Stomatological Division of the Chinese Medical Association, originally established in 1951. The aim of CSA is to improve the oral health of the Chinese people through promoting the development and utilization of dental sciences and technology, heightening the academic level of the professional teams. The CSDA is comprised of registered dentists and was established in 2003. It has two major functions: self-discipline and maintaining legal rights. It is important for the development and management of dental professionals, for the improvement of professional ethics and qualification and for the guarantee of their right.

CHALLENGE AND PROSPECT

At present, a portion of certificated dentists in Mainland China have lower educational backgrounds, especially those who work at private dental clinics. As a whole, the educational level of dentists at private dental clinics is noticeably lower than those at government hospitals. The “post-secondary-no-degree” program for dentistry still exists. The quality of certificated dentists as a whole needs be improved. The methods used to accomplish this may include improving the entrance system of certificated dentists, continuing dental education for the certificated dentists, controlling the number of schools providing the “post-secondary-no-degree” dental educational program, stopping such programs, or various combinations of these approaches.

Development of private dental clinics is an important tendency in Mainland China. However, some factors may influence this development. The low educational background of dentists at private dental clinics is one of these

factors, as described above. Other factors may include scientific management of the clinics, enhancement of self-discipline, or build up of credit. Most of the patients in Mainland China still like to choose government hospitals for their dental treatment if such hospitals are available for dental services at the areas they live. Patients have higher trust in the government hospitals compared to the private dental clinics and in large hospitals over small ones in terms of the quality of treatment and the control of cross infection. The dentists in private clinics need to actively attend continuing dental education to renew their knowledge and clinical techniques. The clinics should have modern equipment and high standards for the control of cross infection. Good communication within them and with health authorities and the public is also important.

Most dental diseases can be prevented by self-behavior and professional methods. As a developing country and with a large population, prevention of dental diseases is very important in China. The National Committee for Oral Health (NCOH) had played an important role on this work since 1989. It was replaced by a formal government organization—Oral Health Section of Center for Disease Control of the Ministry of Health in April 2007. Future work needs to be carefully planned. Policy and financial support are indispensable. ■

Patients have higher trust in the government hospitals compared to the private dental clinics and in large hospitals over small ones in terms of the quality of treatment and the control of cross infection.

PERSPECTIVES ON DENTAL PRACTICE IN EGYPT

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ABSTRACT

The dynamics of modernization that characterize developing countries are reflected in the oral healthcare structure of Egypt. An extensive system of free and government-subsidized care exists alongside modern, Western-style care for the affluent. The rapid population expansion has doubled the number of students accepted in dental schools (almost twice the number in the U. S.), but uneven economic growth makes the viability of the profession uncertain. Dental education follows the European model of five years after graduation from high school, with a mandatory sixth year of residency training. Dental school faculty members are expected to earn a masters or PhD degree in addition to their dental training.

Although millions of tourists travel to Egypt each year to view the wonders of its ancient civilization, modern Egypt struggles to improve its quality of life and economy. Bordering the Mediterranean Sea in North Africa, more than 95% of Egypt's land area is desert. With most of its 77.5 million citizens (2005, estimated) living in the arable land along the Nile River and Delta, Egypt is the most populous Arab country and has one of the highest population densities on earth. The current population growth rate is 1.8% per year and it is expected that 120 million people will live in Egypt by the year 2050. This dramatic growth is adding more than one million new job seekers annually. Inflation and unemployment are both more than 10%, and the economy has performed unevenly in recent years. New job creation is not keeping pace with the enlarging population, resulting in domestic underemployment of young adults and in a large number of Egyptians who work abroad (current estimate: 3.5 million). The difficulty in providing jobs and basic services has created significant strains in most aspects of Egyptian society, including the dental profession.

The education of dentists in Egypt follows a traditional path. After secondary school, students who have been accepted to a dental degree program spend five years at a university faculty of dentistry. The first year of study involves predental

sciences and general education, followed by four years of preclinical and clinical curriculum in dentistry. After graduation, a year of advanced clinical training, such as a GPR or AEGD program, is required before a license to practice dentistry is granted by the Ministry of Health. If an individual desires a position as hospital staff dentist, additional postdoctoral study may be required. Postdoctoral degrees, such as a masters or PhD, are required for careers in dental education. These academic options are offered at Egyptian faculties of dentistry along with postdoctoral specialty programs, similar in principle to western universities offering comprehensive dental training. A dental education from Egypt is positively regarded in Africa and the Middle East, and international students are accommodated. All instruction is in English.

Until 2000, there were eight faculties of dentistry in Egypt, all public universities and all with free or minimal tuition. Since that time and coincident with a



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The speed and facility of communication is globalizing the profession of dentistry, and Egypt is an example of this phenomenon.

suburban construction surge, eight new faculties of dentistry have opened in private university campuses. These new institutions charge significant tuition and fees and offer more student services than are typically available at the government universities. Following the Egyptian tradition of very large predoctoral class sizes (300-450 students per class), by 2012 dental education will double the pre-2000 number of graduates, with a potential to create 5,000 to 6,000 new dentists per year. This educational phenomenon will rapidly increase the density of dentists in Egypt, and will have a profound but unpredictable effect on the profession. If the utilization of dentists by the public remains low, there is a likelihood that many of the newly educated dentists will be under-employed. Following the tradition of Egypt as a source of expatriate labor in the Middle East, recent dental graduates are increasingly seeking international education and employment opportunities. This situation illustrates why international portability of professional credentials is strongly desired by dentists from the developing world.

Data from the Egyptian Ministry of Health's statistics show that 17,714 dentists were registered with the ministry in 2000, for a dentist-population ratio of approximately 20 dentists/100,000 people, or one dentist for every 5,000 individuals. The Ministry of Health estimates that only 20% of Egyptians attend a dental clinic annually, which improves the effective dental manpower to one

dentist for every 1000 active patients. Dental assistants are obtained from the nursing profession, and there are few dental hygienists in Egypt. Income for dentists derives from two sources: fee for service, and salary paid by government for hospital or community clinic service. Consistent with the large bureaucracy in Egypt, government position is cited as the primary occupation by 60% of Egyptian dentists, although many public hospital dentists maintain private practices as well. In the past, private dental insurance has not been a significant source of payment for oral health care, but third parties and major employers are beginning to offer dental benefits.

Over 90% of Egyptians observe Islam, and one of the traditional religious values involves caring for the disadvantaged. Additionally, there are expectations in Egyptian society, residual from the socialized regime of Nasser, that the government should provide basic services. In the area of health care, the government maintains a network of hospitals and community clinics. Some public clinics provide free comprehensive dentistry, but others, particularly in rural areas, limit dental treatment to emergency procedures such as infection management and extraction. Dental colleges also provide free treatment in the predoctoral clinics, as an additional safety net for underprivileged members of society. However, the efficiency and scope of government sponsored oral health care remains inadequate. The Ministry of Health estimates that only 7% of Egypt's population is covered by public dental programs.

At the opposite end of the socioeconomic spectrum, affluent Egyptians demand dental services typical in the developed world. Cosmetic dentistry, implants, and the widening array of specialty techniques are increasing in urban/suburban practices, although four-handed dentistry is not common. International vendors and lecturers, the Internet, Egyptian universities, and the various Egyptian dental and specialty societies all bring information about modern trends in dental practice to Egypt, and of course there is a wide variety of continuing education opportunities available to Egyptian dentists who travel internationally. The speed and facility of communication is globalizing the profession of dentistry, and Egypt is an example of this phenomenon. The modernizing of treatment concepts and the desire by the profession and the general public in Egypt to embrace contemporary life will have a significant effect on the transformation of dentistry in Egypt. The roles of government, private institutions, and outside agencies in this evolution are difficult to predict, but change of oral health care delivery in Egypt seems to be inevitable. Balancing health needs with other basic services to create an equitable quality of life in a sustainable manner remains a major challenge in Egypt for the foreseeable future. ■

Globalization in the Dental Practice

A PERSPECTIVE FROM DOWN UNDER

Johann de Vries, MDent

ABSTRACT

Dental education and practice in Australia and New Zealand are described by a dental dean who has practiced in South Africa, Canada, and Australia. Education is based on the English model, being a five-year program with entry from high school. Variations are being attempted on this approach, with an increasing number of dental students entering with advanced education, multiple degree alternatives, and combinations of auxiliaries including hygienists, therapists, and prosthetists. Dental boards do not examine dental graduates for licensure or actively investigate substandard skill levels or compromised practitioners. Practice is open to dentists trained in other countries based on service in needy areas and a two-part examination process. Specialty licensure is obtained based on examination by the national Royal Australasian College of Dental Surgeons and advanced education normally leads to a degree, including an additional doctoral degree. The most challenging issues facing oral health in Australia and New Zealand remain workforce shortages, especially in remote rural areas, and the cost of dental education.

I have received registration to practice as a dentist in South Africa, Canada, and Australia and I am honored to share my experiences and knowledge concerning dental practice outside the American context. In particular, I am comparing “the ways we do things around here” in Australasia to the North American model. The core of our profession remains that of caring; we serve our societies with the best available knowledge and skills, dedicated to applying the art and science of dentistry. And this is true for the practice of dentistry in Australia and New Zealand.

Education

Perhaps the most significant difference from the North American system, however, is dental education in Australasia. Currently six schools in Australia and one in New Zealand graduate dentists, and graduates are on average younger than in North America. Students are admitted directly from high school (Grade 12), even though a growing number of students are admitted with some form of tertiary experience. At the Adelaide School, approximately 50% of students have education beyond high school. Graduate degree entry is a new phenomenon. The Faculty of Dentistry, University of Sydney, admitted its first graduate entry class in 2007. Melbourne will start a similar program in 2009. The admission processes are very similar at the schools. There is currently no national application or screening process available. All students must sit an admissions test, the UMAT (Undergraduate Medical and Health Sciences Admissions

Test), which is also used by medicine. Interviews and school grades complete the selection triage materials. The applicant pools seem to be smaller than in North America. One reason may be the direct entry from high school, with medicine as the main competitor. Schools admit a number of international students. This number varies, but can be as high as 20% of the annual intake. International students do a different admissions test that can be taken in various cities around the world.

Tuition fee paying is a very different concept than in North America. The government provides a certain number of sponsored places for each dental school, which are reserved for Australian citizens or permanent residents. Fees paid by students who are admitted to these places are similar across the country and are approximately AUS \$8,800 per year. Students in most instances do not pay for instruments and any “other costs.” A student can also take out a government loan for the tuition, which is repayable after graduation and automatically deducted from the dentist’s income when it reaches a certain amount. In addition, so-called “full-fee paying



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Australian places” are also available, but in limited numbers. The University of Adelaide has the largest dental school, and is only allowed to have five full-fee paying places per year. International students pay higher tuitions, differing among schools and ranging from AUS \$33,000 to AUS \$50,000 per year.

Universities are all funded similarly by the government. Dental students are in the same cohort as medical and veterinary students. The universities receive approximately AUS \$25,000 for each student. Most of the schools’ operating budgets come from the university through this system.

The degree program and qualification differ significantly across Australia. Traditionally, the dental degrees are five-year professional bachelor degrees. Degree nomenclature varies: Bachelor of Dental Surgery, Bachelor of Dental Science, Bachelor of Dentistry (four-year Sydney program), Graduate Diploma, and a new DDS program soon to be available at Melbourne.

The university programs are accredited by the national accrediting agency, The Australian Dental Council (ADC). Accreditation site visits take place on a seven-year cycle. The ADC also accredits dental specialty programs. These specialties are the same as those in North America. The ADC also accredits Bachelor of Oral Health (BOH) programs.

LICENSURE

Licensing and registration of dentists is a state responsibility and is preformed by the various state dental boards. However, qualifications are portable across

Australia. There is a Trans-Tasmanian agreement that reciprocally recognizes qualifications between Australia and New Zealand.

An Australian and New Zealand university degree allows the individual to register with the state dental board to practice. No national or state board examinations are conducted and no internship or PGY1 experience is required. State dental boards are also responsible for overseeing the protection of the public.

To license as a dental specialist, candidates must sit the national Royal Australasian College of Dental Surgeons examination. Programs are mostly three years in duration, except for oral surgery that is considerably longer. Qualifications are master’s degrees and in many instances, D.Clin.Dent (Doctor of Clinical Dentistry). At some universities, the D.Clin.Dent is a higher research degree. Maxillofacial and oral surgery requires a dual qualification to practice (medicine and dentistry).

Workforce

The migration of internationally qualified dentists to Australia and New Zealand is significant and a growing phenomenon. A two-part ADC examination is available in countries of origin. After successfully completing the first part, dentists are able to work in public facilities for up to three years. Anytime during the three years, a second part of the examination is done in Australia. Successful completion allows the dentist to have unrestricted

State Dental Boards are also responsible for overseeing the protection of the public.

The practice of dentistry is experiencing one of the best eras in its history; it is the "golden era" for the practicing community in Australia.

registration. In 2007, the ADC will conduct twelve examinations (of the second part) across Australia.

Workforce shortage is a key discussion in Australia, with predictions of an increase in the workforce needs. Currently, Australia has 10,600 practicing dentists for a population of just fewer than twenty-one million people. Dental hygienists have been trained in small numbers in the past thirty years. Dental therapists have served as a core in the public dental services for a long time, especially being responsible for the school dental programs.

A few years ago, a new program started at the dental schools: the Bachelor of Oral Health. This is a three-year program admitting students directly from high school (Grade 12), with a combination of dental hygiene and dental therapy where graduates can elect whether they want to practice as a dental hygienist or a dental therapist. Dental therapists can practice in either private or public sectors. Dental hygienists have similar rules concerning the scope of practice and supervision as in North America. There are fewer than 800 dental hygienists in Australia, with approximately 1,500 dental therapists

and 1,200 dental prosthetists (similar to denturists in Canada).

The big challenge for the profession remains access to care. As in many parts of the world, a misdistribution of the dental workforce is apparent in Australia. Rural and so-called "deep rural areas" are unattractive for professional practice. In a process to address some of the workforce challenges, new dental programs have been announced. Two new programs will commence in 2008, with perhaps more to follow. In addition, many existing schools have increased the numbers of dental students significantly in the last few years in an attempt to partner in addressing the growing needs and demands of society. The utilization of dental auxiliaries, especially dental hygienists, is a new phenomenon with a growing tendency.

A WELL-PLACED PROFESSION

The practice of dentistry is experiencing one of the best eras in its history; it is the "golden era" for the practicing community in Australia.

The majority of patients attending dentists make use of private health (dental) insurance. Patients who qualify for public dental care can attend public dental clinics. Public dental services varies from state to state. In some states, the school's dental hospital/clinic is managed by the public dental system.

Dental practices use the latest, most modern equipment and practice layout. Dental equipment, instruments, and consumables are the same as in North America and are represented by the same dental industry. The organized profession is similar in structure to North America. The Australian Dental Association, the federal body, governs the dental profession with each state having its own branch (e.g., Australian Dental Association—South Australian Branch). Dental hygienists have a similar governance structure.

The major challenges are workforce shortages, including serving rural areas, and a new national licensing and accreditation system to be implemented in 2008. This may remove the authority of existing ADC and state dental boards and become part of the national umbrella for the health professions.

New schools are envisaged; however, appropriately qualified academics may be difficult to recruit. Related challenges concern new schools that are planned for rural areas patterned on the model of "rural medical schools," that form a network across the country in rural areas. Another challenge is the cost of dental education, which is similar to that of North America. Dental schools believe that they are not sufficiently funded by their respective universities. Self-generated income, including fundraising and development and alumni support, are new concepts that have only recently started in Australia. Further, most dental schools are part of faculties of health sciences with yet an additional layer of governance or hierarchy that is different from North America. Some dental schools have a "head of school" rather than a dean, reporting to the executive dean of the faculty of health science. Finally, faculty members are appointed in a very controlled manner with the same salary packages paid to all at a specific level (the three levels are lecturer, associate professor, and professor) so that incentives are difficult to use.

With the booming economy in Australia and New Zealand the profession is well-positioned to grow and provide in the increasing needs and demands of society. The dental profession prides itself in caring with a commitment to excellence, and strives to overcome current and future challenges. ■

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CONFLICTS of INTEREST

ARE INFORMED CONSENT AN APPROPRIATE MODEL AND DISCLOSURE AN APPROPRIATE REMEDY?

Lisa S. Parker, PhD; Valerie B.
Satkoske, MSW

ABSTRACT

Conflict of interest (COI) in dentistry is typically thought to arise when a dentist's exercise of professional judgment for the sake of a patient's interest is compromised by a secondary interest such as increase of reputation or financial gain. Disclosure of conflict of interest is often recommended as a remedy to prevent the erosion of the fiduciary relationship and to permit patients to take steps to protect their own interests. Borrowing the concept of a reasonable patient from discussions of disclosure standards for informed consent, this paper offers a patient-centered definition of COI: a COI exists when the presence of a dentist's secondary interest undermines the reasonableness of a reasonable patient's reliance on his or her dentist's professional judgment. It then argues that disclosure of COI (modeled on other disclosures during informed consent) is an inadequate remedy for the breach of ethics presented by COI and an inadequate strategy to prevent harms associated with COI. It also examines research indicating that disclosure of COI has perverse effects on the informed consent process and patient decision-making, so that disclosure of COI actually inhibits patients from taking steps to protect their own welfare.



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PREVENTIVE ETHICS AND THE DISCLOSURE of CONFLICTS of INTEREST

Modeled on preventive dental medicine, "preventive ethics" provides an excellent approach for consideration of conflicts of interest within dentistry (Forrow et al., 1993). Preventive dental medicine is based on recognizing recurrent oral health problems and taking steps to avoid their emergence in individual patients. These steps involve examination and alteration of structural social issues and background conditions (e.g., access to dental insurance, society's changing nutritional habits, young people's development of tastes and health habits), as well as non-dyadic population-based approaches (e.g., fluoridation of water). Similarly, preventive ethics involves recognition of patterns of recurrent problems, anticipation of conflicts, and consideration of background and contextual conditions contributing to these issues. A preventive ethics approach advocates development of structural solutions in advance of problems' emergence or reemergence. This anticipatory approach involves drawing lessons from analogous situations and examination of multiple perspectives.

Just as brushing and flossing can prevent caries and periodontal disease, the practice of preventive ethics in

Just as brushing and flossing can prevent caries and periodontal disease, the practice of preventive ethics in dentistry may enable dental professionals to avoid or address ethical concerns in order to maintain healthy relationships with patients and colleagues.

dentistry may enable dental professionals to avoid or address ethical concerns in order to maintain healthy relationships with patients and colleagues. The process of informed consent, for example, may be understood in terms of preventive ethics as it is a structural, approach designed to protect patient autonomy and welfare, promote trust, and avoid future conflicts born of misunderstanding or lack of transparency. This paper explores whether disclosure of conflicts of interest (COI), modeled on informed consent's disclosure requirements and warranted by the same preventive ethics rationale, is an appropriate remedy or preventive measure to avoid the negative effects of COI in professional practice.

Typically, disclosure is thought to be the appropriate preventive ethics remedy for COI (e.g., Ozar, 2004). The American Dental Association's *Principles of Ethics and Code of Professional Conduct*, for example, requires disclosure of COI when dentists make representations in educational or scientific venues, as well as to disclose financial incentives involved in recommending particular products to patients (ADA, 2005, Sec. 5). The rationale is that if COI are disclosed to patients, then patients can incorporate that information into their informed decision making process and determine for themselves whether they feel such a conflict undermines their fiduciary relationship with their practitioner, influences the content of their provider's judgment, and threatens the quality of their care. Similarly, an audience listening to a presentation can decide whether to "discount" the accuracy of information imparted because of the potential influence of the speaker's conflicting personal interests. The assumption is that with regard to COI, disclosure—modeled on

disclosure in the process of informed consent—can prevent ethical impropriety, presumably by shifting the burden of guarding against it from the practitioner to the patient.

In this paper, we argue that disclosure is not a sufficient remedy for COI. Merely informing the patient and then, in effect, letting the buyer beware is not an appropriate discharge of the dentist's fiduciary duties and does not serve to prevent the harms associated with COI. These harms include the failure of the dentist to serve his or her primary interest (i.e., his or her patient's health-related interests), erosion of the patient's reasonable trust in the fiduciary relationship and in the professional himself, and erosion of reasonable trust in and respect for the profession of dentistry. We begin by considering sources of conflict of interest as dentistry becomes increasingly commercialized. Then we present a patient-centered definition of conflict of interest and discuss the threat COI presents to the fiduciary relationship between dentist and patient. We then examine the process of informed consent to show the limitations of disclosure as a means of preventing the harms associated with COI. Finally, we discuss empirical research that indicates additional failings of disclosure as a remedy for COI.

COMMERCIALIZATION, CONFLICTS OF INTEREST, AND THE FIDUCIARY RELATIONSHIP

Conflicts of interest exist on many levels and arise from multiple sources. General dentists and specialists alike are increasingly performing procedures which traditionally were considered outside their area of expertise. A general dentist may place an orthodontic appliance or perform root canal therapy, an orthodontist may provide a teeth bleaching procedure, and some oral surgeons are now performing rhinoplasty. This blurring of activities within the practice of

dentistry has not only challenged traditional understandings of the scope of practice and standard of care which dictates an appropriate system of referrals, but also increased competition for financial gain within the dental field and across lines of dental specialization (Curtis, 2006). Conflicts of interest may increase when dentists are motivated by financial gain to limit referrals and perform an increasing number of procedures outside of (or at the outer limits of) their areas of expertise. Competition may result in a lack of collegiality, a failure to make appropriate referrals, and a system in which the patient does not always receive care from the most appropriately qualified type of professional. Thus, potential conflicts of interest abound within the profession.

Increased commercialization in dentistry, as in all branches of medicine, has the potential to place the best interests of the patient in competition with the financial interests of the care provider. Aesthetic dentistry may present a particular challenge in this area, and not merely because of the scale of the potential market. In aesthetic dentistry, the actual risk-to-benefit ratio presented by interventions depends on patients' personal values and perceptions; there is less social consensus, for example, regarding the benefit of aesthetic intervention than about the value of alleviating pain or preserving the ability to eat and speak. Especially in this more subjective, value-laden realm of aesthetic dentistry, dental professionals may find it difficult to discern whether they are primarily considering the patient's interest or their own financial gain when offering such services. Moreover, because the supply of services—the creation of possibilities of aesthetic enhancement—in large measure drives demand, the profession as a whole may be said to face a conflict of

interest in advancing the frontier of possible aesthetic interventions.

Initially, it may be said that a conflict of interest arises when professional judgment regarding one's primary interest, as defined by one's professional duties, is compromised by a secondary interest (Thompson, 1993). Such secondary interests frequently include personal financial gain or increased reputation, but may include less tangible interests, such as the desire to benefit society by increasing scientific knowledge or to preserve a collegial relationship. The ADA Code anticipates the potential for financial conflicts of interest and notes that "contract obligations do not excuse dentists from their ethical duty to put the patient's welfare first" (ADA, 2005, Sec. 3). When secondary interests unduly influence the exercise of professional judgment, a conflict of interest arises. COI arise in situations in which one person relies on another to exercise judgment to act or advise on his or her behalf and that judgment is compromised by some personal interest (modified from Meyers, 2005).

We would extend this analysis and the definition of COI to argue that even when conflicting secondary interests do not actually unduly influence the professional's judgment, a COI exists when the reasonableness of the patient's reliance on his or her dentist's fulfillment of the professional, fiduciary duty to exercise judgment on his or her behalf is undermined by the presence of a conflicting secondary interest. Thus we propose a definition of COI that does not rely on an assessment of the actual motives of a particular professional or the actual influences on his or her judgment—an assessment that is frequently, if not

always, impossible. Instead, our proposed definition employs an objective, reasonable person standard. A COI exists when a reasonable patient may reasonably believe that his or her dentist's exercise of professional judgment is undermined by a secondary interest. This patient-centered definition of a COI is consonant with a generally patient-centered ethic in dentistry and with the values grounding the reasonable-person standard frequently employed in interpreting the demands of the doctrine of informed consent (Berg et al., 2001). Like the reasonable-person standard in informed consent, this definition of COI relies on a socially constructed, publicly assessable view of what it is reasonable for an admittedly fictitious, normatively-defined, reasonable patient to believe.

Consider a dramatic, if rather silly example, of a menacing loan shark that specializes in making loans to dentists. Some dentists may be able to responsibly exercise professional judgment untainted by knowledge that a loan shark is arriving at the end of the month to collect money owed and plans to break the dentists' fingers if they cannot pay up. Other dentists may succumb to the perceived need for some quick cash and self-interestedly recommend cash-producing aesthetic interventions, as well as other interventions that have a high profit margin, without requisite regard for their patients' best interests. We suggest that the presence of the secondary interest in paying off the loan shark constitutes a conflict of interest for all such indebted dentists, whether or not a particular dentist is able to exercise his or her professional judgment untainted by fear for his or her fingers. The situation presents a COI because the presence of the secondary financial and safety-related interests presented by the loan shark would undermine the reasonableness of

a reasonable patient's reliance on his or her dentist's professional judgment. We need not inquire whether a particular dentist was inappropriately influenced when making a particular treatment recommendation; we need only ask whether a reasonable patient's reliance on the dentist's recommendation would be undermined if the presence of secondary interests were transparent. Reference to the reasonable patient is an attempt to employ norms distinguishing appropriate from inappropriate influences. A reasonable patient may still reasonably rely on professional judgment knowing that the professional makes "a decent living" by exercising such judgment, but may reasonably question relying on professional judgment that involves self-referral or prescription of treatments associated with higher-than-usual fees. Such social norms are admittedly fluid, but they can be publicly discussed, unlike that largely unknowable state of a practitioner's mind when he or she makes treatment recommendations.

Having adopted the notion of the reasonable person from the doctrine of informed consent, we turn now to the question of whether disclosure, modeled on the disclosure component of informed consent, is an appropriate way to address COI and prevent its negative effects on the fiduciary relationship practitioners have with their patients.

INFORMED CONSENT AND DISCLOSURE

Informed consent is not a form signed by a patient; an ethically and legally valid consent form merely documents that informed consent has taken place. Informed consent is both the

autonomous action of a patient authorizing a doctor to act for his or her benefit (Faden & Beauchamp, 1986) and a norm-governed process of communication between doctor and patient that enables a patient to make an informed medical decision (Berg et al, 2001). Informed consent has two ethical goals. The first goal is to promote autonomy by allowing the patient to grant or deny access to his or her person and personal information based upon his or her own individual values and interests. The second goal is to protect patient welfare by protecting him or her from unauthorized touching and violations of bodily integrity.

INFORMED CONSENT

In dental practice, the fundamental elements of the informed-consent process are: presentation by the dentist of material information regarding an intervention, understanding of that information by the patient, who then makes a voluntary decision whether or not to consent to treatment (Berg et al, 2001). As a prerequisite to this process, the patient must be competent to consent, i.e., able to understand and appreciate the risks and benefits of the interventions, and capable of reasoning and deliberating about them (and alternative courses of action, including doing nothing), in light of the patient's own set of values (Buchanan & Brock, 1990). If the patient lacks these capacities, then a surrogate decision maker must participate in the process of informed consent on the patient's behalf.

In order to evaluate disclosure as a remedy for COI, further consideration of disclosure, understanding, and voluntary nature are pertinent. Challenges to the voluntary nature of patient decision making can take many forms. Pressure can be exerted by external factors, including other people, role constraints, and social pressures. Instead of having a root canal and crown as treatment, for

example, an elderly woman may reluctantly consent to have a tooth extracted because her son tells her the crown is too expensive and not fully covered by her insurance. Internal pressures may also prevent substantially uncontrolled informed decision making. A strong need to please people may render a patient incapable of refusing unwanted procedures suggested by his or her dentist. Thus an unscrupulous practitioner who recognized this patient's quasi-pathological need to please could breach professional, fiduciary duty and take advantage of his or her inability to refuse recommended treatment.

In addition to intentional and overt manipulation, even unintended pressures within the professional-patient relationship can undermine the voluntary nature of decision making and the exercise of patient autonomy, as well as erode trust within the relationship. A well-meaning dentist might, for example, suggest to a shy young man that having his teeth whitened will make him feel more attractive and confident, and he may feel unduly pressured into consenting to a treatment that he may not otherwise want or be able to afford. Therefore, professionals must base the content and manner of their recommendations on an assessment of what degree of recommendation a reasonable person would find appropriate and resistible, as well as titrate the strength of the recommendation to the degree of benefit (or avoidance of harm) the intervention presents. Further, so far as possible, practitioners must modulate the content and manner of their recommendation to the particular informational and psychological needs of their patients; if a particular patient is known to be exceedingly deferential to authority, a practitioner may take steps

to counterbalance the patient's predisposition to accept professional recommendations unquestioningly.

DISCLOSURE

Like voluntary nature, disclosure and understanding are necessary elements in the informed-consent process. For informed decision making, understanding is more important than disclosure; a decision is made based on what the patient understands, rather than on the information presented to him or her. Nevertheless, the bioethical and legal literatures on informed consent pay more attention to the disclosure element, presumably because concrete recommendations can be made about disclosure and because it is observable and better understood. Whether disclosure has occurred can be ascertained, while assessment of understanding remains more mysterious.

There are various ethical standards that can be used to define or guide adequate disclosure. While reliance on a professional practice standard may be invoked by practitioners to defend their disclosure practices if questioned in malpractice proceedings, this standard is ethically problematic. It gives complete discretion to a group of professionals who could choose to offer a consistently inadequate level of disclosure, instead of engaging with patients to determine what information they feel they need to make an informed decision (Berg et al, 2001).

A preferable disclosure standard is the reasonable-person standard. "Whether information is pertinent or material is...measured by the significance a reasonable person would attach to it in deciding whether to undergo a procedure" (Beauchamp & Childress, 2001, p. 82). Using this standard results in a "core disclosure" that contains these elements: the nature of the recommended procedure, its risks and benefits, alternatives to the

procedure, and practitioner-specific information (Berg et al, 2001). In addition, the difficulty, length, recovery time, and pain associated with a procedure are among the things a reasonable dental patient would want to know. Regarding risks, a reasonable person would want to know their nature, magnitude or severity, and frequency. How likely are the hoped for benefits of the procedure, and are they consistent with the personal treatment goals of the patient? Among the alternatives to the recommended procedure should be the possibility of doing nothing and the risks and benefits associated with that choice.

Beyond this core information based upon what the reasonable person would need to make an informed decision, the practitioner must also offer information he or she believes would be material to the particular patient, as well as respond to the patient's questions. If a dentist knew, for example, that his or her patient was getting married in a few days, he or she should disclose that a procedure may produce a degree of facial bruising and swelling that would be visible in photographs. Or, if there is clinical evidence that acupuncture is showing promise of alleviating symptoms of temporomandibular joint dysfunction (TMJ), a patient may want to know that before consenting to surgery for TMJ, as well as the pros and cons of choosing to receive no treatment at the present time. In order to maximize the patient's ability to make an adequately informed autonomous decision, information presented should be tailored to the patient's needs. Moreover, poor hearing, limited education, and language barriers are just a few obstacles that may need to be over-

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come in order to facilitate an adequate understanding of disclosed information.

Because a patient consents not only to a treatment, but to treatment by a particular practitioner, the final informational element material to decision making is practitioner-specific information. This is also the most controversial element of disclosure (Berg et al., 2001, 61-64). Some commentators (and courts) hold that a practitioner should disclose his or her degree of training and experience performing a particular procedure, degree of training in it, and degree or rate of success with the procedure. Unusual financial incentives should also be disclosed. Patients should be made aware of situations in which treatment may be limited due to financial considerations, such as minimal reimbursements from insurance companies, as well as situations in which a procedure would result in an unusual profit for the practitioner, such as a procedure being reimbursed at an abnormally high rate. Some possible financial arrangements, like self-referral or acceptance of rebates or split fees, are considered so ethically problematic that they are to be avoided, rather than disclosed so that the patient/buyer may beware (Berg et al, 2001; ADA, 2005 Sec. 4).

Similarly, some suggest that health-care providers should disclose any health issues or personal information which could negatively influence their performance or put their patients at risk, e.g., lack of sleep, grief, or turbulent personal relationships (Berg et al, 2001). Yet, just as it is deemed "unethical for a dentist to practice while abusing controlled substances...which impair the ability to practice" (ADA, 2005, Sec. 2), it would seem that other conditions likely to impair professional judgment ought to

be similarly avoided or ought to serve as a bar to practice. It is inadequate merely to disclose them and proceed to practice.

DISCLOSURE AS AN INADEQUATE REMEDY for COI

So, what about conflicts of interest? Is their disclosure an appropriate way to prevent their negative effect on the practitioner-patient relationship, professional judgment, and patient care? We might begin by asking: what, if anything, relevantly distinguishes operating under the influence of a controlled substance, which is to be avoided categorically, from operating while influenced by secondary interests such as financial incentives or the desire to preserve a collegial relationship? One difference is that there is strong social consensus that drug and alcohol use substantially impairs judgment, including professional judgment. In contrast, reasonable people could disagree about the degree and nature of influence on professional judgment exerted by some secondary interests. Some may believe that the opportunity to gain in terms of money or reputation provides incentives for innovation and excellence, while others may see the prospect of high profit as prompting undue risk-taking (or rather, the recommendation of undue patient risk-taking). This difference might argue in favor of disclosing COI and allowing the patient to evaluate their influence on provider judgment in light of the patient's own views.

Second, while drug and alcohol use can be avoided, the presence of secondary interests is unavoidable. Dentists' desires to have friendships, feed their families, and arrive home at a reasonable hour most evenings—all of these socially acceptable interests—can conflict with the welfare of their patients in particular instances. In most cases, however, these do not unduly influence professionals' judgment. These secondary interests are the background conditions of normal life. They are expectable, anticipatable,

and even desirable; we might question the perspective of a professional whose only interest was his or her patients' welfare, his or her professional duty.

Not all influence by secondary interests can be avoided in professional practice the way the influence of controlled substances can and must be. Of course, these secondary interests associated with normal life can lead dentists to sacrifice their patient's interests; however, in most instances they do not; the need to pay a mortgage differs in its influence on professional judgment from the need to pay a loan shark. It is reasonable for patients to expect that dentists can exercise sound professional judgment in service of their patients' interests in the face of the secondary interests of normal daily life, even though in some cases some dentists will not. Even those who advocate disclosure as the remedy for COI suggest that secondary interests only have to be disclosed if they compromise the reasonableness of a patient's reliance on the professional's judgment regarding his or her welfare. To avoid every secondary interest would be impossible and undesirable; to require disclosure of every secondary interest would sap disclosure of any meaningfulness that it may be thought to have.

Furthermore, we contend that there are four reasons that disclosure is not an adequate remedy to conflicts of interest in dental practice. First, it is difficult to identify one's own COI. Second, disclosure of COI has perverse effects on practitioner behavior. Third, disclosure of COI has perverse effects on the recipient of the disclosure. Finally, relying on disclosure to remedy the negative effects of COI is conceptually unsound.

In order to disclose a conflict of interest, a dentist must first recognize it. The dentist must recognize the secondary interests that are likely to unduly influ-

ence professional judgment. The first reason that disclosure fails to remedy COI is that they are so difficult for the person possessing them to identify. If a dentist refers patients to a cousin, a not-quite-capable endodontist, because his or her mother requested it, that is a secondary interest which obviously conflicts with the primary interest, the patients' well-being. Most COI, however, are not so obvious. If a general dentist refers his or her patient's to a well-respected endodontist, who just happens to be his or her best friend, he or she may feel no discomfort, because he or she does not receive any secondary gains, other than the satisfaction of helping a friend while presumably benefiting his or her patient. Research shows that people are consistently poor at recognizing their own biases (Messick & Sentis, 1979; 1983). Even when motivated to be objective and impartial, people "deny and succumb to bias even when explicitly instructed about it," which indicates that "self-serving bias is unintentional" (Dana & Loewenstein, 2003, p. 253). Research also suggests that self-interest influences "the way individuals seek out and weigh the information on which they later base their choices when they have a stake in the outcomes" (Dana & Loewenstein, 2003). In this case, the dentist's friendship may prevent him or her from noting deterioration in the endodontist-cousin's skill or from verifying that the cousin keeps current with new techniques.

This line of research suggests that it is unconscious bias that must be reduced, and this can best be accomplished by eliminating the conflicting interests themselves, as with the prohibition of fee splitting, kickbacks for referrals, or "finder's fees" for recruiting patients to

research studies. Relevant to the case at hand, instead of avoiding referrals to friends or practitioners that one likes, dentists should base their referrals on verifiable evidence of the specialist's expertise, thereby rendering friendship status irrelevant to referral practices.

The second problem with disclosure as a remedy for COI is that professionals' disclosure of a conflict of interest may have a perverse effect on their expression of judgment. In a research setting designed to simulate professionals offering advice, disclosure of the presence of COI seemed to provide the advice-givers with "strategic reason and moral license to further exaggerate their advice" (Cain et al, 2005, p. 22). These investigations suggest that practitioners who believe that a particular intervention is in the best interest of their patient may strengthen their recommendation of it to compensate for the discounting effect they anticipate their disclosure of COI will have on their patients. They may either oversell an intervention's likely benefits, or downplay its risks, or they may exaggerate their authoritative professional role (for example, by suggesting that their financial interest in a product coincides with—or affords—insider knowledge of its virtues). Both the voluntary and informed elements of informed consent may thereby be undermined.

Third, disclosure of COI may lead recipients of the disclosure to process material information in a less accurate manner. People generally believe that biased advice results from the intention to mislead (Dana & Loewenstein, 2003). Therefore, disclosure of a source of bias, a conflict of interest, may lead the advice recipient to underestimate the degree to which the professional is biased because disclosure of COI makes the professional appear more open, honest, and trustworthy (Cain et al, 2005). This may be especially true in the case of professional

recommendations, because people tend to trust their individual practitioners even when they mistrust a profession as a whole (Gibbons et al, 1998; Cain et al, 2005). Moreover, some disclosures enhance the status of professionals as authority figures by aligning them with special expertise and insider status.

The fourth reason that disclosure is an imperfect means of preventing the ill-effects of COI is that it misunderstands that ethical nature of the professional-patient relationship—its fiduciary nature. Disclosure fails to recognize and address the essentially vulnerable situation of the patient within the dental professional-patient relationship. The reason disclosure is attractive is that it purports to put the dentist and patient on a level informational and decisional field. In reality, however, the patient remains vulnerable and cannot be adequately empowered by disclosure of the COI. Indeed, how should the patient respond to such disclosure to protect his or her interests? He or she may be unable to evaluate how the secondary interests influence the provider's judgment. Yet he or she would have to understand the nature, direction, and magnitude of influence in order to know how to correct accurately for the degree of bias in the professional judgment offered. Moreover, he or she may lack financial resources to seek other professional advice or be in too much pain to do so.

These practical concerns reflect the nature of the fiduciary relationship between dentist and patient, who are inherently unequal in relevant expertise. The recommendation of disclosure as a remedy for COI fails to appreciate the

inherently and unavoidable unequal nature of fiduciary relationships. Patients are dependent on their dentists for their trustworthy exercise of their professional judgment. Simply disclosing that one's professional judgment may, in fact, be influenced by secondary interests to the detriment of the patient's interest, does not make such influence ethically permissible.

Conclusion

Disclosure is thus conceptually and ethically unsound as a complete remedy for COI. While it would seem that information about the presence of a dentist's conflicting secondary interests should be material to the reasonable patient's decision making process, in fact patients typically do not make use of information about COI in ways that protect their interests or enhance their autonomous decision making. Disclosure of COI, modeled on disclosure of other material information, therefore, does not prove to be a practical remedy for COI. Disclosure's practical, and thus ethical, failings reflect its failure to take into account conceptual and ethical features of the fiduciary provider-patient relationship, most particularly the degree to which vulnerable patients must rely on their dentists to place patient welfare above other interests. ■

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A LARGER SENSE of PURPOSE

DENTISTRY AND SOCIETY

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ABSTRACT

Dentistry is undergoing a subtle shift away from being a profession to becoming a business. The two cultures of professionalism and business are contrasted. Among the forces driving this change are the emphasis on esthetics in dentistry and the increasing inability of a large class of patients to access dentistry on a business basis. The shift toward dentistry as a business entails the unhealthy transition toward regarding patients as means to satisfy the dentist's ends rather than patients' health being an end in itself. Dentists run the risk of "objectivifying" rather than "humanizing" patients. This trend must be overcome with a larger sense of purpose; placing dentist's self-interests within the larger context of enlightened self-interest.

In 2005, Harold T. Shapiro, former president of Princeton University, published *A Larger Sense of Purpose: Higher Education and Society*, a book based on his 2003 Clark Kerr Lectures at the University of California. The book prompts a consideration of a larger sense of purpose in the profession of dentistry as it relates to society. The intention of this essay is to convey the notion that the profession of dentistry ought to serve interests that include, but move beyond, narrow self-serving concerns. As Shapiro indicates, the Latin expression *non nobis solum*, loosely translated, "not for ourselves alone," echoes this thought.

We are all concerned with purposeful existence—of living a life filled with meaning—with purpose. Viktor Frankl, the distinguished Austrian psychotherapist, authored what has become an internationally best-selling classic: *Man's Search for Meaning*. In it, he documents the trauma of his years in Nazi concentration camps, trauma that led him to a pivotal understanding of human existence—and an understanding that provided the foundation for his work in psychotherapy for the remainder of his life. His world-famous approach to therapy he called logotherapy, or meaning therapy. The foundation of his therapeutic approach is the imperative for us to create a deep and abiding sense of meaning for our lives. He said, "Man's concern about a meaning of life is the truest expression of the state of being human." Humans need a reason to live, a meaning for life, a purpose. Frederick

Nietzsche, the German philosopher, expressed it in *Twilight of the Idols* as "He who has a why to live can bear with most any how."

My thesis is that changes are taking place in the profession of dentistry that are eroding the sense of purpose and meaning that dentists in the past have derived from their professional existence. My belief is that we must challenge and resist these eroding forces and forge "a larger sense of purpose" for our professional lives. To do so, I will argue that we need to reaffirm two basic principles: that our patients are not simply a means to our ends, but rather ends in themselves; and that as a profession, we are responsible for ensuring access to a decent, basic minimum of oral health care for all.

DENTISTRY AS A PROFESSION

Clearly, a significant dimension of the life of each of us who are dentists is the life we experience in our practice of dentistry. In becoming dentists, and professing dentistry, we have acknowledged that one important purpose for our existence is to assist our patients gain and maintain the benefits of oral health.

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Learned professions evolved in the Middle Ages as some members of society became literate, and with that literacy acquired practical knowledge and skills based in learning. These individuals held considerable power over others as they knew when others did not know. As the Dutch philosopher Baruch Spinoza affirmed in *Ethics* (1677), “knowledge is power.” The knowledge these learned professionals held, and the skills they acquired, were relevant and important because they were required by members of society in order for society to function. Traditionally, these learned professionals have been understood to be physicians (including we oral physicians/dentists), attorneys, and the clergy. Physicians held power over the physical well-being of others; attorneys held power over much of material well-being through their ability to draft contracts; and clergy held power over spiritual well-being. This power differential in the relationship between these learned professionals and those they served required that patients, clients, and confessants place trust in the professional’s knowledge and abilities. They were vulnerable in the face of the knowledge differential, and therefore had to trust the learned professional to act in their best interests. As a consequence, these professionals made promises or vows to society that they could be trusted to place the interest of those they served above any narrow self-interest. The word profession is rooted in the word “profess,” which literally means to vow or make a promise (May, 1980). Thus professions

and professionals have been understood through time as individuals who have promised society that they would place their learning and expertise at the service of society in order to advance societal well-being. Our profession of dentistry has been granted a virtual monopoly to practice dentistry as a result of the trust and respect society has in our profession’s promise to make the oral health of our patients and of society our primary purpose.

TWO FACTORS DIMINISHING MEANING AND PURPOSE IN DENTISTRY

There are two trends occurring that are threatening to undermine the traditional understanding of what it has meant to be a profession and that, in my judgment, are potentially diminishing the sense of meaning and purpose we derive from being dentists. First, an increasing number of dentists are coming to understand dentistry as primarily a business; and second, as an outgrowth of this understanding, too many dentists are neglecting the many individuals in society who are in need of care, but lack the economic wherewithal to pursue care in the marketplace of dentistry as a business. I want to protest against these two circumstances, and suggest that our traditional calling as professionals in dentistry challenges us to “a larger sense of purpose.”

THE CHANGING FACE OF DENTISTRY

The last half of the twentieth century brought significant improvements in the oral health of Americans. These improvements were ushered in by the significant research conducted in our colleges of dentistry and research institutes in preventing the ravages of dental caries and periodontal disease. Many of our citizens under forty years old have had relatively little experience with dental

caries that decimated my generation. While there has been a significant reduction in oral disease for the majority of our population, the socioeconomically disadvantaged have not experienced the success of preventive dentistry to the same degree as our more socioeconomically advantaged citizens. Today, the majority of oral disease exists among those who cannot economically access oral health care, and in many instances, have also not yet learned through education to value it (U.S. Department of Health and Human Services, 2000).

Today there is a valuing, not only of oral health, but also of oral esthetics. As a consequence, many dentists are spending much of their practice time providing esthetic services to individuals who are relatively free of oral disease. With so many services being elective and esthetic in nature, and with what seems to be an increasingly materialistic and individualistic orientation to life, many dentists have developed a sense that dentistry is primarily a business, and they have begun to abandon some of the traditional attitudes, understandings, and behaviors of dentistry as a profession.

DENTISTRY AS A PROFESSION AND DENTISTRY AS A BUSINESS

The concept of profession has strong cultural overtones. “Culture is the collective mutually shaping patterns of norms, values, assumptions, beliefs, standards, and attitudes that guide the behavior of individuals and groups, whether those groups be families, religions, races, geographic regions, nations, businesses, or professions” (Gibson, Ivancevich, & Donnelly, 1988; Kuh & Whitt, 1988; Sergiovanni & Corbally, 1986). Norms are what the culture understands as normal; that which should occur naturally; the culture’s guiding rules or principles. Values are what the culture desires; desires create purpose; purpose provides meaning. Assumptions are what the culture takes for granted, what it

presupposes. Beliefs are those notions in which the culture places its trust and confidence. Standards are the uniform referents of the culture; the touchstones used in measuring and evaluating. Attitudes are the emotional intentions of the culture, what it feels and wills.

To describe differences among cultures is not necessarily to draw moral conclusions or judgments, only to characterize differences. Of course, one can prefer one culture over another. Preferences are not necessarily moral statements. There are differences between the cultures of France and of China, between the cultures of Europeans and of Americans, and between the cultures of Jews and of Muslims. And, to the point of this discussion, there is a difference between the culture of a profession and the culture of a business.

Based on the concept of profession, the culture of dentistry can be described (Nash, 1992). The norm of dentistry is that oral health is a primary good, an end in itself. The values of dentistry are care and concern for all people and their oral health. The assumption of dentistry is societal good. The belief of dentistry is that cooperation and reciprocity with society can result in good for all. The standard for dentistry is justice and fairness in all dealings with patients and society. The attitude of dentistry is egalitarianism. Dentistry has historically understood itself to be a profession, to have the culture of a profession, and thus has laid claim to professional privileges.

Understanding dentistry and its culture as a profession is in tension with understanding dentistry and its culture as a business. Yet many dentists today seem to be adopting the culture of business. In the culture of business, the norm of dentistry is that oral health is a means to a private end, that of the

dentist; with patients being part of the means to that end. The values of dentistry in the culture of business are entrepreneurial: building a successful enterprise—making profits. The assumption of dentistry as a business is that the private, personal good is to be maximized. The belief system of dentistry as a business is that dentistry is a component of the free enterprise system. The standard of dentistry as a business is the marketplace. The attitude of dentistry as a business is social Darwinism.

The late Talcott Parsons (1968), of Harvard University, considered to have been the “dean” of American sociologists, defined a profession by contrasting professions with businesses. “The core criterion of a full-fledged profession is that it must have means of ensuring that its competencies are put to socially responsible uses...professionals are not capitalists, and they are certainly not independent proprietors or members of proprietary groups.”

Traditionally, dentistry as a profession has focused on serving the oral health needs of patients and society, with the financial gain derived from such being a natural and appropriate consequence of the service provided. Today, increasing numbers of dentists understand themselves to be practicing in the marketplace of health care, competing for patients, treating patients with the primary motivation of earning a significant profit for their services. In short, they are operating within the culture of a business.

Rashi Fein (1982), the noted Harvard health economist, expresses distress regarding the transformations occurring: “A new language has infected the culture of health care. It is a language of the marketplace, of the tradesman, and of the cost accountant. It is a language that depersonalizes both patients and health professionals, and treats health care as just another commodity. It is a language that is dangerous.”

My thesis is that changes are taking place in the profession of dentistry that are eroding the sense of purpose and meaning that dentists in the past have derived from their professional existence.

In *The Republic*, Plato presents a dialogue between Thrasymachus and Socrates in which Socrates responds to Thrasymachus: “But tell me, your physician [dentist] in the precise sense of whom you were just speaking, is he a moneymaker, an earner of fees or a healer of the sick? And remember to speak of the physician [dentist] who really is such....Can we deny then, said I, that neither does any physician [dentist], insofar as he is a physician [dentist], enjoin the advantage of the physician [dentist] but that of the patient.”

In contrasting the nature of dentistry as a profession versus dentistry as a business, it is necessary to draw a distinction between social and consumable goods, a distinction pointed out by the intellectual father of market economics, the Scotsman, Adam Smith. In his 1776 work, *An Inquiry into the Nature and Cause of the Wealth of Nations*, Smith argues for such a distinction. He affirms that there are basic “social goods” upon which the free market for “consumable goods” is dependent. The marketplace cannot function absent safe, secure, healthy, informed customers. Ensuring such should not be considered commodities of the marketplace. Basic oral health care is, or should be, a social good comparable in nature to police protection, public safety, fire protection, public education, and basic general health care. Basic oral health care is not, or should not be, a consumable product of the marketplace similar in nature to furniture, electronics, sporting equipment, travel, or entertainment.

Increasingly, we are coming to appreciate that oral health and general health are intimately linked. Oral health

has an important relationship to general health and well-being. One is not healthy without good oral health. The health of a country’s citizens, including its oral health, is an important requisite for a market economy. As such, it is imperative that dentistry as a profession should advocate for access to a decent, basic minimum of oral health for all. One bioethicist (Callahan, 1987) has defined a decent, basic minimum as “that level of care our society would cringe at the thought of someone not receiving.”

In the U. S., 75-80% of the dental caries in children occur in 20-25% of the child population; these children are from our lowest socioeconomic groups (Kaste et al, 1996). Well over one-third of the population, over one hundred million people, do not have access to the oral health care delivery system, and over twenty million of them are children—our most vulnerable population (U.S. Department of Health and Human Services, 2000).

The practice of dentistry is, or should be, the practice of a profession. Dentistry is only a business in the sense that good business practices must exist in support of professional practice. Clearly there is a tension between understanding dentistry as a profession and viewing it as a business. If a practice of dentistry is to be economically successful, it must be managed with good business practices. However, the tension that exists enables one to easily mistake means for ends.

MISTAKING MEANS FOR ENDS

Dentistry as a profession serves the end of human well-being, oral health for individual patients and for the larger society. While professionals derive financial gain from their life’s work, it is truly derivative; a by-product of fulfilling the promise or vow they made in becoming a professional. A profession is a way of life, a vocation, not only or simply a way of making a living. Dentistry as a

business sees the oral health of individual patients specifically and society generally, not as ends in themselves, but merely means to the dentist’s personal ends.

Dentistry as a business serves the end of personal profit, with oral health being understood as a means to that end. Understanding dentistry primarily as a business places dentistry in the marketplace, where oral health care becomes a commodity produced and sold for a profit. The business model of selling cures undermines the professional model—a model rooted in a tradition of caring.

The distinguished American medical educator and ethicist, Edmund Pellegrino concluded in a 1999 article in *The Journal of Medicine and Philosophy*: “health care is not a commodity, and treating it as such is deleterious to the ethics of patient care. Health is a human good that a good society has an obligation to protect from the market ethos.”

Immanuel Kant, the nineteenth-century German philosopher, emphasized the universal moral imperative of treating others as ends in themselves, rather than as means to our personal ends. The second formulation of his “categorical imperative” states: “Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time an end” (Kant, 1785).

Martin Buber (1958), the Jewish theologian, spoke of the “I-Thou” relationship between individuals, and distinguished it from an “I-It” one. According to Buber, human beings may adopt two attitudes toward others. In an I-Thou relationship, one fully engages one’s whole self with the other person as a unique human being deserving of respect, to be related to as an end in their self, not as a means to one’s own ends. It is a relationship of

reciprocity, or mutuality, one of subject to subject in which there is a meaningful experiencing of the other. In contrast, an I-It relationship is one in which the other is treated as a “thing,” a “what,” not a “who.” He speaks of “thingifying” others, treating another in a relationship as a thing to be used as a means to achieve one’s own ends or purposes. It is a relationship of separateness and detachment, one of subject to object. As things, people—in our context, patients—are viewed as objects of action rather than subjects. Patients must be understood and acknowledged as ends in themselves, not simply means to the dentist’s ends.

In his recent book, *Social Intelligence*, the popular author of *Emotional Intelligence*, Daniel Goleman, discusses the significance and importance of Buber’s understandings. He says that the I-It relationship implies the most superficial of relationships. The emotional indifference and remoteness of an I-It stands in direct contrast to the attuned I-Thou. He indicates that empathy is the critical foundation to an I-Thou relationship. Empathy is the capacity to imagine oneself as the other, to project one’s self into another’s circumstance to sufficiently understand the other’s feelings. Goleman suggests that the defining quality of an I-Thou relationship is that the other has a sense of “feeling felt.”

Dentists are called to care for patients—care, not in the sense of managing or handling something, as in “you take care of that,” rather in the sense of being genuinely concerned for the welfare of patients. There is increasing discussion in the literature of the health professions regarding the importance of empathy as a critical quality of the health professional. (Branch, 2000; Charon, 2001; Halperin, 2001; Tong, 1998). Empathy is an imperative for an ethics of caring.

A practitioner who uses and manipulates patients, to whom patients

and their oral health is valued because it enables the dentist to achieve his or her financial (business) ends and goals, who adopts an I-It relationship with patients rather than an I-Thou one, dehumanizes the professional relationship.

My argument is that the transformation from understanding dentistry as a profession to understanding dentistry primarily as a business results in a seemingly subtle, but actually significant, impact on one’s sense of purpose, from a meaningful and purposeful caring for patients’ and society’s oral health to being in business to make money. Life demands a “larger sense of purpose.”

Enlightened Self-Interest

The European Enlightenment of the eighteenth century brought new social and political understandings. Among them was the appreciation and valuing of self-interest. However, there was also the realization that our personal, private good, our self-interest, is ultimately grounded in the good of others—the common good. Thus emerged the notion of enlightened self-interest. While we are all self-interested, and not inappropriately so, our self-interest is best served when we reflectively rise above it and focus on the good of others.

It is my belief that we must call on our Western intellectual and cultural tradition of enlightened self-interest as a needed corrective to the individualistic and business culture that is infecting our profession today. Unless all of our fellow citizens are stakeholders in the good of society, none of us will be. Understanding such and acting accordingly is an acknowledgement of an Enlightenment principle fundamental to the concept

Today, the majority of oral disease exists among those who cannot economically access oral health care, and in many instances, have also not yet learned through education to value it.

of what it means to be a profession—and a professional.

Ironically, contemporary business has increasingly come to understand that the orientation that has been traditionally associated with the professions is what is best for business—that is, placing the customer's needs and interests first and foremost, developing a trust relationship with customers. The watch cry of the marketplace in the past has been *caveat emptor*, or “let the buyer beware”—beware because the marketplace is a competitive and financially dangerous place where the seller is trying to sell a commodity at the highest price, and the purchaser is trying to buy it at the lowest price. Currently, there are individuals who are suggesting that the customer stands a better chance of being treated fairly in the marketplace, because of guarantees offered by contemporary corporations and merchants, than the patient can expect in the professional healthcare delivery system (May, 1977).

Charles O. Wilson, a noted entrepreneur of the marketplace and the chief executive officer of General Motors at the apogee of its success, while testifying before a Congressional committee, made a statement that became widely misquoted; possibly because it seemed a counter-intuitive comment for the leader of America's largest corporation. He is frequently reported as saying, “what is good for General Motors is good for the country.” He spent the remainder of his life correcting people who misquoted him. As the Congressional Record

indicates, what he actually said was “what is good for the country is good for General Motors.”

Let us affirm that what is good for the oral health of the citizens of United States is good for the profession (and its related business dimension) of dentistry. However, we must be vigilant to ensure that we neither come to believe nor promulgate the reverse: that what is good for the profession of dentistry is good for the country's oral health.

JUSTICE IN THE RELATIONSHIP OF DENTISTRY WITH SOCIETY

John Rawls, the late Harvard professor of philosophy, in his influential book, *A Theory of Justice* (1971), explicates the nature of justice by using what has become a famous hypothetical. He asks one to stand behind a “veil of ignorance” and envision a world into which one will be born, but not knowing into what circumstance he or she will be born, that is, to a rich or poor family, intelligent or dull, male or female, American or Asian. He argues that given such a condition, people will design a world with some degree of risk aversion. In such a rationally designed world of self-interest, the following three conditions would exist: a) each person would have an equal right to the most extensive system of liberties comparable with a system of equal liberties for all; b) persons with similar skills and abilities would have equal access to offices and positions of society; and c) social and economic institutions would be so arranged as to maximally benefit the worst off. This last condition is the one most directly relevant in considering the responsibility of dentistry to society. Rawls affirms that in such a world, differences in status will ultimately result due to the range of differences among individuals in native talent and ability. However, he states that while these resulting status differences

may be unfortunate, they are not unfair.

Given a Rawlsian view of justice as fairness, the profession of dentistry—as a “social and economic institution,” and one granted a virtual monopoly to practice by society—has an obligation to work for a healthcare scheme that permits the “worst off” in society to gain the benefits of oral health. Today, the socially and economically disadvantaged have the worst oral health and the poorest access to care (U.S. Department of Health and Human Services, 2000). Such is clearly an issue of social justice. A lack of definitive action on behalf of society's disadvantaged calls into question the reciprocity of the profession of dentistry with society, creating the question of fairness in the relationship, an issue of justice—of ethics.

Conclusion

A meaningful, purposeful existence—it is something we all cherish. It has been said that life is for learning, loving, and leaving a legacy. We dentists spend an extraordinarily portion of our days and hours focused on our professional work. Continually learning from the expanding scientific base that supports our clinical endeavors so we can provide the highest quality care possible, and loving our patients and society by empathetically caring for their oral health, will permit us to reflect on our lives in such a manner as to be able to acknowledge that we have lived with a “larger sense of purpose,” and that we are leaving a genuine legacy. ■

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MOTIVATION

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ABSTRACT

Motivation is short-term focused energy. The oldest theories of motivation explain motivated activity as effort to overcome primary deficiencies, such as hunger or boredom. Such theories are difficult to apply because individuals learn idiosyncratic secondary motives as alternative ways of responding to these needs. Three prominent needs theories are discussed: Herzberg's theory of hygiene and motivational factors; McClelland's needs for achievement, power, and affiliation; and Maslow's hierarchy and theory of self-actualization. A second approach to motivation holds that individuals may be thought of as engaging in rational processes to maximize their self-interests. The presented examples of this approach include Vroom's expectancy theory, Adam's theory of inequality, and the Porter-Lawler model that addresses the question of whether satisfaction leads to high performance or vice versa. Finally, several theories of motivation as life orientation are developed.

A recent survey conducted by the Academy of Management identified the fifty best established management theories. Almost 20% of these were theories of motivation. I don't know whether to feel happy about this: so much theory—so little practical control over others, so little self-control. Is it too much to ask for just a bit more reliable prediction of what causes people to act the way they do? It is not as though this were a new field of inquiry. Human nature has taken its time to settle in on its current pattern; some good minds have been watching and commenting.

The key insight is that human nature is complex. That is why there are multiple theories. They are not wrong. Each is just inadequate to the dignity, richness, and variety of the human condition. In order to be simple enough to be readily grasped, each theory must be limited in context or extent of behavior accounted for. One of the great paradoxes of motivation is that those things we strive so hard to get are seldom as attractive once they are obtained. The same may be true of our understanding of human nature: new insights open new wonder.

This fluid understanding of what makes folks tick can be illustrated by contrasting what people wanted in oral health in the 1970s and today. These views are depicted in the accompanying diagram. In the scientific era of dentistry, oral health needs have been regarded as much greater than the capacity to

address them. But only a portion of that need is converted to demand. Dentists have tended to feel that all the citizens of America should see them at least once a year. Only about two-thirds do so. The perceived demand, those who would say, "I really need to see the dentist," might be 75% or 80%. The effective demand, those who sit in the chair, is smaller. The difference between perceived and effective demand has to do with dithering on the potential patients' parts and access barriers. But the old model worked on the premise that oral health care received is a subset of oral health care needed, and the motivation question was one of mitigating patient and delivery system barriers that hampered the conversion of need to effective demand.

The new model works differently. Now the language is "needs-based dentistry" and "wants-based dentistry." In the best of lights, the current conception works to maximize the overlap between what patients need and what they want. In the worst of lights, this same view explicitly acknowledges that dental care is being provided to individuals who do not need it and that there are others who need it but do not receive it. (We have no convenient word for individuals who need oral health care but are not patients.) Those who both need and want dentistry are in the "oral health-care" system. Those who receive health care that they do not need (routine checkups) are also in the system, but arguably, they are taking somebody else's place. Those who want dentistry that they do not need are in the "oral

care” system. And those who need dentistry but cannot convert this to effective demand are an access issue. Thirty years ago, the chasm of unmet need was proportionally as great as it is today, but few besides public health dentists talked about it. It is no accident that the “access” issue and “oral care” (without the health part) have arrived together in recent years.

This is not entirely a dentistry problem; it is societal. In a *Boston Globe* article, “Dangerous delays to see skin doctors,” dated January 7, 2007, Liz Kowalczyk reported that a canvas of 851 dermatologists in the Boston area revealed an average waiting period of 73 days for an appointment over concerns about “changing moles.” If you want to contrast that with “wants-based dermatology,” *Google* “Botox” and “wait”—there is none! An office visit for a cancer screening can be billed at from \$50 to \$60. Botox is several hundred a pop, and staff can handle it. One MD who manages a clinic commented on this seeming imbalance in values: “We need to make cosmetic work available partly so we can hire and keep dermatologists.” Someone who is smarter than I am will have to explain this to me.

MOTIVATION DEFINED

Motives activate and orient behavior. Buying the newest gadget or going to a sports event are examples of motivated behavior because specific actions are aroused. Thinking about “doing some-

thing” does not count. Motivation entails arousal, emotions, desire, energy, activity, pursuit. Motivated people are active. Motivation also focuses attention. It involves choice, attention, focus, direction, purpose. When a pattern of activity is focused on a goal, we say the individual is motivated.

Motives, as specific action potentials, are short-lived. That is why the greatest motivational speakers—ministers, coaches, politicians—have to tell their stories over and over again. That is also one of the glories of eating; no matter how well we do it, we will have to do it over again soon. In our ordinary way of speaking, we sometimes confuse the short- and long-term commitments to pursuing goals and call them both “motivation.” Carelessly, we say “Mrs. Blunderbust isn’t motivated to sound oral health” or “I wish I knew how to motivate my office staff with a good work ethic.” Long-term, general goal orientation is more properly discussed under the heading of values, leaving motive to do the short hauling. Short-term solutions (motivation) tend to accumulate a lot of frustration when misapplied in hope of changing other’s values. A lot of little attention getters seldom add up to an altered world view; and they tend to become tedious. The truly interesting question in motivation theory is not what gets people going; it is what makes our targeted interest shift so frequently from one interest to another.

The remainder of this essay will sample from the great diversity of established theories of motivation. These will be presented in three groups:

America appears to be suffering the ravages of having turned off shame and guilt as naturally protective signaling devices.

Over a lifetime, a handful of primary needs can multiply into a blizzard of secondary ones, some of them strong and difficult to predict or detect.

a) needs theories, b) process theories, and c) orientation theories.

NEEDS THEORIES OF MOTIVATION

"I need some rest." "I need a little respect." "I need to stop this awful pain in my tooth." When we hear statements such as this, we predict that the speakers will very soon stop working, spend more time with a friend, and go to the dentist. This is the needs theory of motivation—people orient toward and spend energy to correct deficiencies or meet their felt needs. If we know what they need, we know what people will do. The advertising industry is built on this approach. If you want to know what America thinks of you, watch a few commercials to see what they are trying to tell you you need.

This is the oldest model of motivation. Lists have been made of what we need, usually beginning with primary needs such as freedom from hunger, physical threat, and illness, and more recently some positive needs such as a rich and stimulating world, acceptance, and companionship. These needs are so fundamental and universal that individuals who fail to orient toward them are thought to be deviant.

As useful as the primary needs might seem, they get us very little mileage in our daily work with motivation. In the first place, most of us have our primary needs met most of the time. There are also cases where the primary needs conflict. For example, patients in physical pain (one primary need) may avoid dentists because they lack money or fear the dentist (other primary needs). A complicating factor is that the primary needs generate secondary ones over time. Women (and occasionally men) may need relationship so much that they learn to tolerate abusive relationships. The repeated pairing of going to the

dentist in the absence of symptoms may create a secondary need for preventive care or even hypochondriasis. Over a lifetime, a handful of primary needs can multiply into a blizzard of secondary ones, some of them strong and difficult to detect or predict.

In addition to generating idiosyncratic secondary needs, the primary needs also come with or grow signaling conditions that act much like needs themselves. No one literally needs gas in their car when the tank is one-tenth full, but most of us properly act as though we do. Pain, embarrassment, and disorientation are not damaging in a direct sense; they are original equipment built-ins that signal a need to attend to real primary needs. Disabling this equipment (as some prescription drugs and self-help programs promise to do) could be dangerous. America appears to be suffering the ravages of having turned off shame and guilt as naturally protective signaling devices. Finally, although there may be some commonality among individuals on primary needs, there is a wide range of means used to satisfy them. The discomfort of gingival bleeding translates into a dental visit for fewer than half the individuals who suffer with this need and to even a smaller number who will follow the advice of their dentist about the condition. Needing to look like a million bucks does not automatically translate into a full-mouth reconstruction. This is why fear tactics are so unworkable in dentistry. They magnify the activity part of motivation but not the orientation part.

In summary, primary needs are satisfied most of the time and become overgrown with learned secondary ones. Various primary needs may be in conflict with each other. We tend to ignore or turn off the signaling devices that help us manage our primary needs. Finally, there are usually multiple ways to satisfy primary needs so that knowing the need may not give good information

about which behavior will be used to satisfy it. Motivating others in a predictable fashion is hard.

HERZBERG

The first of a trio of Boston scholars to have made landmark contributions to the needs theory of motivation is MIT professor Frederick Herzberg. Although he does not use the term, his approach is built on the concept of “enough.” He does say that motivation operates differently under conditions of scarcity and sufficiency. When talking about scarcity, Herzberg uses the phrase “hygiene factors,” and he defines these as environmental and extrinsic conditions, such as noisy and chaotic work situations, angry interactions, physical pain, and fear. What Herzberg calls “motivators” are intrinsic in nature, such as meaningful work, love, and a desire for self-improvement.

Herzberg posits that hygiene factors cause dissatisfaction and poor performance as well as goal-directed effort to reduce the stress they cause—but only to a point. Once a satisfactory level is reached, motivation ceases—that is the “enough” part of his theory. Freedom from constant interruption improves performance; but isolation does not. Dentists will recognize this effect in patients who discontinue emergency treatment as soon as they are out of pain and in staff members who put in only enough effort to satisfy their lifestyle ambitions.

Motivators, by contrast, are not especially sensitive to satisfaction below the “enough” point. Dentists who see themselves among the elite of the profession do not count CE hours. But above the “enough” point, individuals are strongly motivated by intrinsic rewards. Patients with “functional dental

values” may be thought of as working on a hygiene basis; when these are satisfied, there is little to motivate them to go further—there is no hyperfunction. Those on an “esthetic dental values” basis—those activated by motivators—can never be entirely satisfied.

Money is a special case. It is a hygiene factor to anyone who does not have enough of it—many patients and many staff members. It is a motivator, having more symbolic and intrinsic meaning, to those who have their basic financial needs covered—some patients and most dentists. This fundamental difference in the meaning of money as a motivator is a potential source of miscommunication in the dental office.

McClelland

Now deceased Harvard professor David McClelland is our second Boston area expert on needs-based motivation. McClelland devoted a lifetime of research to grouping basic needs into three clusters. Some individuals see the world as an incomplete task and they value the opportunity to persist in the face of obstacles in completing these tasks. They are the dentists who relish the big cases because of the challenges they present and the ones and the patients cannot afford for the same reason. McClelland labels these individuals as having a high need for achievement. He identifies other individuals as having a high need for power. Such dentists like big cases for their income potential and the opportunity they provide to document the successful before-and-after cases on the CE circuit. They enjoy denying the small cases and telling other dentists how to do so. For those with a need for power, the world appears to be a hierarchy with some having lots of personal influence and others having little, and their goal is to be near the top of that hierarchy. The third cluster is need for affiliation. Here, the dominant world view is creating a

network of mutually supporting and verifying personal interactions. Dentists often instinctively recruit staff members with this orientation and then frustrate themselves by not becoming part of this team themselves.

McClelland’s three-part needs structure helps explain the way individuals read basic needs through different lenses and thus take different courses of action.

Maslow

The most famous theory in all of the business literature is Brandeis professor Abraham Maslow’s hierarchy of needs. For fifty years it has been unthinkable to publish a textbook in management without a picture of his triangle-shaped hierarchy. At the base of the pyramid are physiological needs such as food, sex, and a comfortable environment. Next up are safety and security concerns such as freedom from threat and assurance regarding the future. Social needs and esteem needs are at the next highest levels. Social needs include belonging to a group, meaningful interactions, and affiliation. Esteem is both self-respect and recognition from others. At the top of the pyramid is “self-actualization.” There is some ambiguity about what this means, but the general idea is unlimited personal growth.

Maslow is admired for the positive nature of self-actualization and for drawing attention to the hierarchical nature of needs. If several needs are present, the one lowest on the hierarchy takes precedence. Maslow would quickly

My Bus Ride with Maslow

I spent an evening with Abraham Maslow when I was a graduate student, and it made a large impact on me. I rode, with several Harvard faculty members on the way to a psychology association meeting, in a bus that had been equipped for research studies, and we picked up Maslow in Watertown, Massachusetts. There were four professors and myself on the three-hour trip. Finally I broke the silence with a typically jejune comment, "So, Dr. Maslow, how does it feel to be self-actualized all the time?" I died of mortification when he answered, "I'm not sure I would know." (I thought, oh no: I have him confused with Herzberg or McClelland or somebody else.) He went on to explain that there were very few fully self-actualized people—Gandhi, Moses, Lincoln in the later part of his life. Maslow had only put self-actualization into his theory as something of an afterthought. He observed that many people, especially the great ones, were motivated even when they had everything the external world could have desired for them. He had to create a level of motivation that was perpetually open to personal growth, something beyond the basic needs, and something that transcended his famous rule that satisfied needs are no longer motivating. Maslow was a favorite of the hippies in the '60s because they mistook his self-actualization for a birthright they could carry with them in their Baby-boomer, Botox, Boxster, extreme makeover world. That bus ride for me always meant that we can in our rare and most human moments transcend the limits of motivation.

tell dentists, "handle your patient's chief concern before selling comprehensive care" and "don't talk to your staff about teamwork until they all have what they consider to be a living wage." But Maslow's greatest contribution to the theory of motivation concerns how individuals move from one type of need to another. The operational concept is that satisfied needs are no longer motivating. We move up the hierarchy by meeting the lower needs, and then we only go to the next higher level. It is useless, Maslow would say, for a dentist to seek fame (esteem) without first attending to building relationships. No one gets to self-actualization by working on it; this is only achieved by having all the other needs met, and then it emerges automatically. (In the 1960s when Maslow was writing, mothers used to tell their daughters about men not buying cows if they got the milk for free. I do not know what they tell them now.)

Coffee-table inspirational books often say something to the effect that the journey is more important than the destination. That is only partially true. I would rather have a million dollars than to be working for a million. Maslow can help us out of that confusion. What we value is different from what we are motivated to strive for. A million dollars is worth more than two bits (values). But I would rather be working on my second million than hoarding my first (motivation). What people want is not necessarily what they work to achieve; only the latter concerns motivation.

PROCESS THEORIES of MOTIVATION

Even the basics of needs theories of motivation are probably beyond the operational repertoire of most of us. Unless we spend several hours a week thinking of motivation at a deep theoretical level, we have probably

defaulted to motivation management as a habit rather than a skill. The process theories that are now introduced are somewhat more complex still. They are based on the premise that people "act as though they were making rational choices about what is in their best interests." We know that this is a rare event and is prompted only by special circumstances. Nevertheless, knowing these theories can give insight into some of the mechanics of goal-directed effort, and those general principles are sometimes handy.

VROOM

Victor Vroom developed the idea that people act in ways that maximize their expected advantage. We choose the big payoff over the small one. We also prefer the sure thing to the risky prospect. And we back those efforts that are likely to produce a result over those over which we have little influence. Vroom reasons that we can predict where individuals will put their effort (what they are motivated to address) if we know the answer to three questions: a) what is the reward worth if it is achieved, b) what is the likelihood that an activity, once put in play, will produce the reward, and c) what are the chances of putting the process in play? This is simple arithmetic: two probabilities and a reward (technically speaking, all that is necessary is a rough estimate of the probabilities and a relative ranking of the various rewards under consideration).

It is improbable that anyone will actually calculate such expected outcomes—either the person offering them or the individual making the choice. But it happens all the time that we form rough estimates of whether others will choose one course of action over another,

and these estimates are often based exactly on the three factors that Vroom identifies. Voting behavior can often be predicted using this approach. Or, consider an example from dentistry: Dentists automatically offer treatment plans to patients that could be paraphrased as a) this outcome will be functional and esthetic, b) there is a 100% chance that I will deliver it as promised, and c) your commitment will be some time and money and a bit of pain and inconvenience. Sometimes alternatives are presented, usually with smaller rewards and smaller costs. When patients choose a different option than the one the dentist anticipates, he or she is forced to recalculate. It might be useful in those circumstances to engage in a discussion of the elements in the decision from the patient's perspective, including that one about 100% certainty on the outcome (patients know better.) Consider a different example. The dentist considers adding machined prosthetic restorations to the practice. This would involve cost and effort in terms of education and changing the office routine. The project will never get off the ground (zero motivation) if any of the three elements has a low value or probability. And usually it is the lowest value or probability that carries the biggest weight. When that is the case, it is a waste of time to talk up the others.

Adams

J. Stacy Adams is associated with equity theory. This is jokingly known in the management literature as a very sophisticated explanation for why we are all so lazy. Here is the question Adams attempts to answer: how hard should you study in dental school, or how much time would a patient invest in homecare, or what is the best level of practice for you? The answer is, "just enough to get a fair return."

But the insight offered by Adams is that this calculation is not objective; it is highly subjective and influenced by personal reward/risk assessments and comparison to one's peers. The first comparison involves an estimate of whether the reward is greater than the effort. If $\text{Reward personal} / \text{Effort personal}$ is not greater than 1.0, alternatives are sought. Favorable ratios are good, but they prompt comparisons. We want to know whether our $\text{Reward personal} / \text{Effort personal}$ is bigger than the $\text{Reward peer} / \text{Effort peer}$ ratio others enjoy. A peer could be anyone—a classmate, a dental colleague, a friend at church or the country club; anyone we regard as being similar to us in talent, circumstances, or fortune. Adams contends that the only world worth living in is one where $\text{Reward personal} / \text{Effort personal} > \text{Reward peer} / \text{Effort peer}$.

There are only so many ways to manage this inequity. The effort of one's peers is entirely out of reach. Their rewards are remote as well, except for cases of cheating, slander, and other nefarious acts. That leaves us pretty much on our own resources to manage perceived equality. Reward can be influenced, but this involves education, system redesign, and other broad changes that have no guaranteed prospect of success. The easiest way to balance the equation is to reduce our own effort. It is known technically as shirking—reducing effort while hoping to get the previously agreed reward. There is a lot of coverup, misrepresentation, and hypocrisy in this strategy. But even if you have not engaged in any of it yourself, signs of its being one of the most highly motivated approaches are easy to spot. The patient slacks on homecare, or payments. Staff members

come in late or take shortcuts but still expect full pay. Your business partners or professional colleagues are not carrying their load.

PORTER-LAWLER

Lyman Porter and Edward Lawler develop a comprehensive theory of motivation in the workplace (or dental setting). There are ten elements in the model and obviously it is not an approach anyone would take in solving a problem in motivation, unless it were a one-timer, high-stakes project such as designing a compensation program, deciding on the level of care to offer, or whether one should retire.

These two researchers do, however, answer an age-old question in motivation and incorporate their answer into their model. The question is "do contented cows give more milk?" There has long been disagreement among psychologists and management researchers over whether increased employee satisfaction raises productivity. It is easy to show that companies, and dental offices, where productivity is low are characterized by grumbling, depression, and disaffection. Highly productive offices have the opposite characteristics. But that does not establish which is the cause and which is the effect.

The research is pretty clear now that high productivity leads to positive motivation. This will come as disappointing news to those who are

CHARACTERISTICS OF FIXED AND GROWTH MINDSETS

Fixed

Fixation on performance (this time)
Need to prove oneself over and over
Hides or makes alibis for deficiencies and mistakes
Inaccurate estimates of true ability
Avoids feedback (unless glowing)
Gives up easily
Fears (really dreads) judgment
Surrounds oneself with ‘yes men’
Stays with a problem as long as successful
Effort is sign of weakness, no talent
Failure is an issue of one’s identity

Growth

Fixation on learning (future times)
Interest in what the world can unfold
Mistakes happen, apologize, fix them, and learn
Generally realistic self assessment
Seeks feedback from multiple sources
Persistent
Converts judgment to feedback and challenge
Looks for those from whom they can learn
Stays with a problem as long as learning
Effort is accompaniment to learning
Failure is an accompaniment of learning

counting on exhortation and psychology to raise office effectiveness. Better offices through motivational programs are a short-term gimmick. Instead, employees and dentists get excited about working in effective offices. Patients and dentists take great satisfaction in good dentistry. It does not work the other way, no matter how good a talker you are.

Now, there is more to the story that Porter and Lawler paint about the relationship between satisfaction and performance. The expectation of satisfaction does lead to high performance. That is the message that has been built up in the preceding pages. If there is a realistic reason to believe that performance will bring about desirable outcomes, expected satisfaction will drive performance. Oftentimes, the best way to motivate someone is to show them how they can succeed. Education, clear policy, and effective work processes are powerful motivators.

ORIENTATION THEORIES OF MOTIVATION

Needs theories are concerned with the external antecedents of motivated behavior. Process theories are concerned with the patterns of repeated stimuli and responses. Orientation theories involve the consequences of motivated behavior. All individuals do not respond to motivational situations the same way; their orientation colors the meaning of the activity. A patient who fears oral cancer may be relieved to learn that a severe periodontal condition will require nothing more than surgery; while an individual who prides himself or herself on a “perfect body image” will be deeply disturbed over a few 5 mm pockets. A newly hired assistant comes in early, spends extra time with patients, and leaves the work area immaculate. One might assume the assistant is trying to create a good impression; alternatively, the assistant could be scared to death of losing this, her first job ever held, and is intimidated working for “the doctor.” A dentist may refer all endodontics because he or she has a better practice without it or because he or she cannot do it well. Different interpretations of the

situation mean that different motivational issues are being faced.

Three examples are given here of orientation approaches to motivation. The oldest theory is that some individuals are motivated to seek success and others to avoid failure. While the behavior, working hard for example, may look the same, the situations differ. Those working to avoid failure have more rigid and less creative behavior, are more likely to give up after several unsuccessful tries, and tend to set unrealistically high or low goals for future performance. More recently, Tory Higgins of Columbia University has proposed a “promotion orientation” and a “preventive orientation.” The first alternative is associated with the ethical value of beneficence—maximizing good for the patient and others. The latter is associated with non-maleficence—first do no harm. It is clear that both orientations cannot be simultaneously satisfied. It is equally clear that a “non-event” means little to a dentist with a promotion orientation and a

great deal to one with a prevention orientation. They keep score differently; they are motivated differently.

A new theory in this field has been proposed by Carol Dweck, formerly of Columbia and now at Stanford. She speaks of a “fixed mindset” and a “growth mindset.” Because of training in childhood, perhaps because of genetics, and certainly because of circumstantial conditions, some individuals see ability as a fixed asset. In this view, talent is something you are born with. Challenges are opportunities to prove, by superior performance, that one is naturally gifted and entitled to success. The growth mindset, by contrast, is dominated by an assumption that regardless of general capacity, ability can be improved. In dentistry, the clear example is digital dexterity aptitude. The evidence is overwhelming in dentistry, and other surgical specialties, that dental students and dentists have no higher manual dexterity aptitude than does the general public and that there is no association between measured aptitude and success as a student or a practitioner. Despite this literature, the profession maintains a fixed mindset, both selecting students to dental school based on presumed aptitude and singing the virtues of practitioners who have “golden hands.” The crowing among dental schools who claim to have recruited the “best and the brightest” leaves some room to suspect exaggeration.

Some of the differences between the fixed and the growth mindsets are summarized in the table opposite. The contrast between these two approaches to motivation can also be captured in a study performed by Dweck with young adolescents. She used a series of puzzles and created one of two different mindsets with such language as “We are testing to see whether you have innate talent for such puzzles” or “We are testing to see

how people learn from such puzzles.” Here is what she observed: Kids who were induced into the growth mindset gradually continued to perform better as they took on more challenging puzzles, even speaking of the excitement of the challenge when they were not performing well. They sought feedback. When asked to describe to others what the task was like, they were encouraging and tended to slightly exaggerate how well they had done. Those who were induced to the fixed mindset performed well on simple tasks but lost interest as the puzzles became more challenging. When given a choice of what feedback they would prefer to see, they wanted to look at the failures of others who had done poorly. They lost interest in continuing with the task. When asked to describe the task to others, they were less enthusiastic, but they vastly overstated how well they had done.

A word about cheating: There appears to be a motivational mindset that promotes this flaw and it comes wrapped in the glitter of innate talent, of never being seen in public to make a mistake. Simply put, when individuals are motivated to successful performance above all else they will seek to preserve that appearance. Our superstar society teaches bad motivation. ■

Better offices through motivational programs are a short-term gimmick. Instead, employees and dentists get excited about working in effective offices.

RECOMMENDED READING



Summaries are available for those recommended readings marked by asterisks. Each is about eight pages long and conveys both the tone and content of the original source through extensive quotations. These summaries are designed for busy readers who want the essence of these references in fifteen minutes rather than five hours. Summaries are available from the ACD Executive Offices in Gaithersburg. A donation to the ACD Foundation of \$15 is suggested for the set of summaries on friendly competition; a donation of \$50 would bring you summaries for all the 2007 leadership topics.

Belasco, James A, and Stayer, Ralph C. (1993).

Flight of the Buffalo: Soaring to Excellence, Learning to Let Employees Lead.*

New York: Warner Books. ISBN 0-446-67008-1; 355 pages; about \$13.

The old management paradigm is that the boss is responsible for everything; that is not longer effective because of the pace of change and the need to be responsive at the individual customer level—it is also tiring. The new paradigm is a flight of geese where each is responsible for their own work and may rotate through various positions. The book stresses employee responsibility, empowering employees, staying close to the customer, and continuous learning.

Dweck, Carol S. (2006)

Mindset: The New Psychology of Success.*

New York: Random House. ISBN 1-40000-6275-6; 276 pages; about \$25.

By training (and perhaps other influences) we tend toward a fixed mindset orientation or a growth mindset. The former sees talent as set and focuses on confirmation of excellent performance and shies away from effort and feedback. The latter seeks challenge, feedback, and opportunity to learn. The writing is choppy and shallow, as if an academic was trying to write a popular seller—which is exactly what the book represents.

Smith, Charles P. (Ed.) (1969).

Achievement-Related Motives in Children.*

New York: Russell Sage Foundation. No ISBN; 264 pages; cost unknown.

Classic collection of early research papers establishing achievement motivation as a stable personality characteristic

including realistic goal setting and persistence toward success. By contrast, fear of failure, or as it was originally called, test anxiety, leads to unrealistically high or low goals and lack of persistent performance. Both are learned early in life.

THE CLASSIC READINGS ON NEEDS AND PROCESS THEORIES OF MOTIVATION:

Adams, J. S. (1963).

Toward an understanding of inequality.

Journal of Abnormal and Social Psychology, 422-436.

Herzberg, F. (1968).

One more time: How do you motivate employees?

Harvard Business Review, January-February.

Maslow, A. H. (1943).

A theory of human motivation.

Psychological Review, 50 (4), 370-396.

McClelland, D. (1976).

Achievement Motivation.

New York: Halsted Press

Porter, L. W. and Lawler, E. E., III. (1969).

Managerial Attitudes and Performance.

Homewood, IL: Irwin-Dorsey.

Vroom, V. (1964).

Work and Motivation.

New York: John Wiley and Sons.



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