

Stock Market Investment Strategies

Evidence-Based Dentistry

It doesn't take a rocket scientist to decide which of these topics will hold the greater interest—but more on the market later.

First, EBD. To start with, we as individuals in dentistry are being lead (maybe "force-fed" would be a better word) to an understanding of Evidence-Based Dentistry. Every meeting and every scientific journal is telling us that clinicians must now make informed decisions in treatment based on critical reviews of statistically proven evidence. We are being told this is the only way that quality health care can be provided. We are further led to understand that all other treatment is based on worthless experience-related observation. Now we are being told by the basic scientists, researchers, and the "acronym identified" health think tanks that dentists can no longer rely upon the opinions of experts or the practical observations of individuals in dentistry. We must rely on systematic reviews of evidence.

Articles, studies, case reports, clinical research reports and lectures in meetings—reported first hand by the individuals who created them—will become a thing of the past. Rather a third "informed party" will have to be relied upon to assist us. They will: 1) select scientifically validated treatments; 2) provide the statistically based information related to success or failure of treatment; and 3) point out specific information that hasn't been scientifically evaluated.

How convenient! We can now cancel all of our journal subscriptions; we can cancel our memberships in the various dental organizations to which we belong; and we can spend our money on real vacations now, rather than attending dental meetings. We will now use profession systematic reviewers and/or the organizations to which they belong. They will systematically assemble, synthesize, and summarize the information that we couldn't

manage for ourselves and which we are privileged to receive, for a healthy fee of course.

Medicine's American College of Physicians has initiated professional systematic reviews in two new evidence-based journals. The *British Dental Journal* now has an *Evidence-Based Dentistry* supplement. U.S. medicine's Agency for Health Care Policy and Research (AHCPR) has taken a big lead in submitting twelve clinical practice guidelines to the National Guideline Clearinghouse, a service created by the AHCPR in partnership with the American Medical Association and the American Association of Health Plans (AAHP). Added support for these systems-review clearinghouses will soon come from the government's National Institute for Dental and Craniofacial Research (NIDCR). Seen in this light, can organized dentistry be far behind?

The planners, the bean counters, the dry-fingered dentists, the researchers, and the think tankers all want to directly influence the organization of dental education and dental practice now as we enter into the 21st century. They say "enough already" when we want to teach and learn skills. They say enough, for repetitive actions in treatment that make us better and better and more proficient with practice. They say forget the immeasurable personal interactions and thoughtful concerns for patients that probably influence success in treatment more than we know. And finally, they don't even want us to think about the fact that we dentists are not physicians; and we are not a determiner of life or death; and for sure they don't want to recognize that we practice and think and treat and develop skills that are much different than those of physicians. And yet, they want us to follow the medical model!

Finally, as long as dentistry is being forced into evidence-based studies, would it be asking too much to recommend an evidence-based study that will compare the steadfast success of dentistry to the confusing, frustrating, mixed up mess of medicine? □

guideline which a reader and continuing student can use to critically appraise clinical research articles involving dental therapy. Their analysis criteria* (edited) are as follows:

1. Is this study able to answer the clinical question or meet the study objectives as stated by the author?
2. What is the research design?
 - a) randomized controlled trial
 - b) case control trial
 - c) case series
 - d) other
3. Were there any potential biases in patient selection?
 - a) consider the inclusion/exclusion criteria to gather the test subjects
 - b) consider how the patients were assigned to the treatment groups
 - c) was there potential for the investigator to eliminate subjects from entering the study if the investigator thought a particular outcome was likely?
 - d) did the subjects or practitioners select the subject's treatment?
4. Are all participants in the study (practitioners, patients, data collectors) blind to the treatment?
 - a) is there anyway the blind process may have been violated during the study?
 - b) if participants were not blind to the treatment, what were the potential effects on the results of the study?
 - c) is this a situation where we must accept that the treatment cannot be blind?
5. Are there any potential biases in the delivery of the treatment such that study subjects might not have been treated the same?
 - a) was there potential for practitioners to be able to alter the treatment based on knowing the treatment assignment?
6. Were the data collected prospectively or retrospectively?
 - a) is this a chart review?
 - b) were the data collected from existing physical records?
 - c) were the data originally collected for the purpose for which the investigator analyzed them?
7. Were there any potential biases in the way the data were collected?
 - a) were all subjects' data collected the same?
 - b) was there potential for data collectors to be less objective about data collected, possibly based on knowing the treatment assignment or supposed outcomes of the treatment?

c) were the same data collected for everyone?

8. Was more than one examiner used in the study?
 - a) were the examiners trained and tested for level of agreement in outcomes assessment?
9. Was the criterion for success clearly defined and measurable?
 - a) were the criteria consistent with clinical practice?
10. Were the results analyzed correctly (good statistical analysis)?
11. Were the conclusions consistent with the data and results available in the report, or were they "stretched?"
12. Were the results clinically significant?
 - a) will the results help me in treating my patients?
 - b) would the results compel me to alter my current clinical practice?
 - c) would I select this therapy for myself or for my family?

*By permission of the Academy of Prosthodontics' Research and Education Committee

Mentoring

We hear much today about the lack of father figures and heroes in our society. Is the society at large a reflection of our specialty? One can look at the specialty and wonder if there is a disappearing act among mentors and role models. In various discussions we sense that is happening, but whether it is or not, we can and should think about our continuing obligations to mentor those following us in training. Society demands it and our specialty demands it.

A good start in addressing mentoring is a recognition of authority, and good mentors impart authority. The recognition of authority becomes most important when finally the mentored realize that they have become the authors of their own lives. Many teachers don't realize that their students are on such a discovery course. It takes this valid observation about mentoring coupled with great patience to instill the necessary wisdom the student is seeking. We are not talking skills here, we are talking an umbrella of "fatherhood."

At any age we need father figures badly. We need people that can provide us with wise

counsel and guidance, and people that can shed wisdom on our decisions.

Using politicians as an example, it is the image of the role model, the father figure, and the mentor that is important. It is not their achievements in the main that count. It is their actions, their decisions, their management of problems, and their treatment of their fellow man that counts.

Other examples serve us in our study of mentoring. Look at the great numbers of children in our society without fathers. Sorry to say, our observations tell us that life without a father may be a life without a clear direction. In some cases it can be a life without a moral compass. But almost certainly it will be a life of some longing for guidance and help when needed, and a life of searching for the answers when the answers aren't easily seen.

Do those of us in teaching positions see our opportunity? After all, heroes happen, they are not made or book learned. The same is true with mentors. We all have had teachers. Some were good and some were bad. We remember some and quickly forgot others. Do we remember our mentors? As we say in the West, "you betcha!" In fact, we remember them so well we don't lose contact with them. We call them, we ask them for advice, we go to meetings with them, we take their lead in preparing for the Boards, and we even tell them when things go sour, because we need to "lean on them." We want their fatherly advice. And best of all, we let them know when we have been successful, because we know they have had a share in the success.

Who can say what is needed to be a good mentor? No one. Is there a book, an article, a set of oaths much as the Boy Scout Oath? It's doubtful. Does experience and observation shed some light on what works and what doesn't? Somewhat. What are the tenets of "mentorship?" Here are some:

- Recognize the truth and always tell it.
- Be willing to listen, not to give advice, or critical review—just listen.
- Say to yourself, I'm preparing this person to —replace me.
- I do things and have interests. I will share

these interests if asked, and share them without obligation.

- Is my every action fair? Fair to all and applied equally to all?
- I will not be vindictive. I will forgive. I will forget.
- I will not think myself as better than some. I may have deficiencies, but I will have an abundance of humility.
- Do I expound to gain stature and to inflate my ego? Hot air balloons rise, but inflated egos don't!
- Do I treat all individuals as my family? If not, then possibly if I look closely, I have troubles in my family.
- When asked, what will it hurt to say yes?
- If I become so busy I can't do anything, then I have given up my most precious asset, my time. I have nothing to share or give away if I can't give of my time.
- Are these tenets equally applied to my office staff, my students, my friends, my family?

Without a mentor's example we are without a guiding light. Without a mentor's control we are without authority. Without a mentor's sharing, we are without a feeling of confidence in ourselves. Without a mentor's backing, stresses and pressures lie completely on our own shoulders. Where is there to turn? Without a mentor's watchful eye, there is no one expecting excellence from us. Without a mentor's encouragement, there is no reason to sail in harm's way. The first steps of the long and arduous path to Diplomate status are always the highest; steps we may dare not take unless we have a mentor's demands to seek the highest level of recognition.

The message is clear: Mentor and be mentored. It's a win win deal. It's a challenge none of us should ignore!

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Now, the market. In the "old days" one could study the stock market, select various companies, look at their projected strengths and weaknesses, and with some sense determine which stocks might build a favorable personal portfolio. This was an example of individuals studying and making individual determinations based on the given facts.

More recently, we have seen "experts" in the market who feel they can make better projections and make better groupings of stocks by using systematic reviews of all stocks. These reviews are suppose to assist the investor in the selection of stocks by using scientifically validated stock reports. These reviewers provide information, scientifically based on the success or failure of the companies they analyze. And with that, they identify stocks that have not been validated by their scientific techniques in order that those stocks can be avoided. The better groupings of stocks they identify have become known as mutual funds.

Because there are increasing numbers of experts available, there are now more systematic reviews of stocks (mutual funds) than there are stocks. The choice becomes not which stock to choose (many), but which systematic review of stocks grouped in unique portfolios to choose (many more mutual funds).

Over the years we have seen that even though the reviews are highly scientific, some mutual funds aren't faring as well as others. Also many mutual funds aren't doing as well as some individually selected stocks. Investors have discovered that they may be no better off with mutual fund investments than they were with the previous held stocks. Some investors have gained, and some investors have lost.

The question is who to believe? Who has the best systematic review? And does the individual investor have a better grasp of the investments he or she is making? And does the delegation of responsibility to the reviewers result in better investments? Remember, the investors are being told by leading economic authorities that they can no longer rely upon their own judgments, and that practical observations are not reliable. They must use systematic reviews of stock market data. But if we follow this strategy and read the advisors' newsletters, we know we will all be millionaires in no time.

Does all of this sound familiar? It should,

although we know stocks are not treatments and stocks don't directly affect an individual's health. Certainly a stock or mutual fund choice shouldn't be a life or death matter. But there is a definite analogy between the stock/mutual fund example and the evidence-based dental treatment that we are hearing so much about. □

So what are we to do?

For starters, let's be certain that dental schools continue to teach skills, impart a desire for lifelong learning, and above all teach students that they must think—think for themselves.

If there are too many treatment regimes and too many new introductions of materials and techniques for the independent practitioner to assess, using evidence-based criteria, then a filtering system must be developed. We must know and learn more about how to independently assess and weigh what we study and read, especially as specialists (see below).

If researchers want to take over dental education and clinical dentistry in order for us to make it through the 21st century, let's be certain that the researchers can deliver care in the patient's mouth and on the patient's head under the most trying circumstances. Let's insure that the researchers understand the whole patient along with the patient's fears, the patient's expectations, and the patient's pocketbook.

Let's put some sense in this evidence-based dentistry craze, and for sure let's recognize that the hands and minds of practicing dentists and dental specialists hold the future of dentistry. Certainly, the future of dentistry and the dental specialties should not rest with systematic reviewers residing in the AMA, the AHCP, the AAHP, the NIDCR or even the American Dental Association (ADA). Thanks anyway! □

Some guidelines to assist in article review

At their recent meeting in Calgary, Canada, the Academy of Prosthodontics set forth some guidelines that should be greatly helpful to the individual practitioner in article review. Member's of that Academy's Research and Education Committee have been actively involved in disseminating information related to evidence-based review. A worthwhile primary objective of the committee was to present a