

Diagnosis – A Fitting Homonym

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It is interesting to realize that some words can have multiple definitions. Although these definitions may be related, they can also be miles apart. A good example of this lies in a word that is quite fundamental to the health profession - the word “diagnosis.” It is defined as “*the art or act of identifying a disease from its signs and symptoms.*” It is also defined as “*investigation or analysis of the cause or nature of a condition, situation, or problem.*” (Merriam-Webster Dictionary)

Which Definition Do We Use?

I believe that the diverse meanings of the word “diagnosis” characterize the reason why the United States rates only 37th in the World Health Organization's ranking of the health care systems out of 191 countries. These meanings are also significant in the transition of my dental practice into a Wellness Center. To illustrate this, let's compare these meanings in a practical manner, both medically and dentally.

In dental school we are taught to perform a thorough oral examination primarily looking for diseases of the teeth and their supporting structures – decay and gum disease. We are taught to develop a “diagnosis” and treatment plan to take care of these problems, such as repairing and cleaning teeth. This approach prevails in most all conventional dental practices and it satisfies the first definition as described above. Practical examples of this in medicine and dentistry:

“Mr. Smith, you have high blood pressure and your blood tests show that you have an elevated cholesterol level. I am prescribing you two medications that will address each of these conditions.”

“Mrs. Jones, you have two cavities and your gums are bleeding. We recommend that you appoint to have the cavities filled along with deep cleanings to stop your gums from bleeding.”

I diagnosed and treated my patients according to the first definition for several years out of dental school as I was taught to do so by my teachers. I thought for sure they must be smarter than me, so I followed their directions. But after being in practice awhile, I noticed that many of my patients did not get healthier sitting in my dental chair having their teeth repaired and cleaned. I repaired them very well too, as I garnered top awards upon graduation for excellence in repairing and replacing teeth. I also cleaned their teeth well and hired the most talented hygienists I could find. Still, many patients' gums still bled and their teeth needed continual repairs.

Frustrated by this, I decided to take post graduate courses in oral microbiology – perhaps if I could learn more about the causes of oral disease, the oral bacterial environment, I could be of more help to these patients. I wanted to find out how these unseen critters could actually turn hard tooth enamel into soft-as-cheese decay, and cause gums to become infected and bleed. We had studied oral microbiology in dental school, but weren't taught how to use the information to help our patients. Our task as dental students was only to learn about the many bacteria that inhabit the mouth and then repeat them on tests for a passing grade.

During one of the courses, while viewing examples of gum disease causing bacteria under the microscope, an idea hit me - why not get a microscope for my practice to discover what types of bacteria were in my patients' mouths? Viewing the actual culprits would give credence to what was actually causing their teeth to decay and gums to bleed. Perhaps it would motivate them to learn how to control these deadly bacteria and also give me an opportunity to become a more effective teacher/helper. Yes – I said decidedly – as around this time the literature was also giving evidence that oral bacteria can affect the rest of the body, not just the teeth and gums. I became aware was impressed by the work of Dr. Charles

Bass, cardiologist and dean of Tulane Medical School who said: "In almost all ailments of the heart caused by bacteria, the source of infection is known to be the pathologic and infected environment of the teeth," and that of Dr. Charles Mayo, cofounder of the Mayo Brothers Clinic saying: "If a person can take care of their teeth and gums they can extend their life by at least 10 years."

Although the phase microscope is quite effective in discovering whether a patient's plaque is active with bacteria as well as being a visual motivator for patients, it is somewhat limited in determining the specific types of dangerous bacteria that cause gum inflammation and enter the body system. We now also use a simple in-office test, the BANA Incubation Test, to detect the presence or absence of three of the most harmful oral bacteria as well as other more sophisticated diagnostic tests using saliva to show the exact nature and amount of other harmful oral bacteria. One also exists for determining whether a patient has a genetic predisposition to periodontal disease. I was learning periodontal disease can be unique to each person and that "One Size Doesn't Fit All." I was also learning how the inflammation process in gum disease can raise blood sugar and cause free radicals that are directly related to heart attacks and strokes. I was now feeling a heightened responsibility to my patients in not just helping them keep their teeth, but to educate them as to how the condition of the mouth can affect their general health, and their role in becoming healthy. I was beginning to realize the shortcomings of treating patient as I was taught in dental school which was based upon the first definition of the word "diagnosis."

Although I had a lot to learn as to how I would integrate this teaching element into my practice, it has been worth the time and effort, as through the years many patients who were losing teeth now gained a reality on the importance of their part of the health equation and became willing partners. They not only were saving their teeth, but were becoming healthier systemically. I am proud to say that besides seeing my patients become healthier both orally and systemically, I have not had one patient in all these years lose all their teeth and need full dentures, if they had their own teeth upon becoming a member of my practice. This type of success that the practice is experiencing with its patients is a living example of successful application of the second definition of the word "diagnosis," and warrants the practice being named a Wellness Center.

Along this learning odyssey, Dr. Robert Lee, who was a research biologist prior to becoming a dentist, became one of my mentors. After graduating with honors and being in practice a short time, he realized that some patients rarely, if ever, needed dental care. They had attractive smiles, no gum disease and exhibited no teeth wear. Being curious, and having research-based experience, he decided to do detailed studies of these patients. He made models of their mouths, recordings of their unique functional jaw movements as well as photographs of their teeth in these various functional positions, as well as x-rays of their jaw joints. After closely studying over 300 of these people, he discovered that they all shared basic attributes that allowed them to go through life with few, if any, dental problems. These attributes are the guidelines that are taught in the organization that was spawned from his discoveries, known as the Foundation for Bioesthetic Dentistry. I was fortunate to have studied under him directly for several years, and then teaching with him and the organization. These principles guide me in treating my patients out of head and neck pain, vertigo, migraines and elimination of teeth wear.

My attaining a Fellowship and Mastership in the Academy of General Dentistry, conferred on just over 2,000 of one million dentists worldwide is based upon instructive and practical (hands-on) course work in all fields of dentistry followed by a written examination. I am also one of just over 300 dentists world wide trained in all four levels of Bioesthetics coursework. These learning experiences have offered me a far different view of dentistry – a far cry from the conventional dentistry I used to practice which follows the first definition of the word "diagnosis." Having learned the "why" behind the many oral afflictions I see daily with my new patients has led to the development of the mission of The Dental Wellness Center, which is to teach its patients about the nature of their oral system to such a degree that they can make

informed choices regarding its future, a living example of the second definition of that very important word, “diagnosis.”