

## Guest Editorial *From Repair to Prevention: The Wellness Model of Care*

Treatment today is based on signs and symptoms. Patients more readily commit to treatment when symptoms exist, especially when symptoms are severe. Conversely, patients with disease and without symptoms may think they are well and conclude that treatment is not needed. Insurance plans justify treatment using clinical and radiographic signs without examination of or communication with the patient. Clinicians establish treatment plans that are basically the same for patients with similar diagnoses, and prevention, when incorporated, is applied uniformly. This philosophy of care has been called the repair model. It has been followed for many decades, resulting in improved oral health for children and adults in many parts of the world.

Knowledge about the nature and causes of caries and periodontal disease has increased enormously since the 1970s, making possible use of a wellness model. The repair model targets treatment to lesions, whereas the wellness model targets treatment to lesions plus causes. The restoration of a carious lesion is solely reparative, as it has no effect on the causes—bacteria and diet. In periodontal treatment, on the other hand, it is difficult to distinguish between treatment of lesions and treatment of causes. Root planing and periodontal surgery affect the periodontal pocket, lesion, and bacteria, a cause. The inclusion of the causes of disease in treatment planning using the wellness model requires risk assessment to identify a patient's unique set of risk factors that increase the probability of disease occurrence by being part of the causal chain or exposing the patient to it.

Disease prevalence and risk must be stratified in a population for the wellness model to have maximum utility. Without stratification, all patients or no patients would be at elevated risk of disease; therefore, quantifying risk has scant utility in guiding treatment planning. While in years past stratification of disease was minimal, it is certainly the norm today. Prior to 1970, disease was considered ubiquitous; today, about 20% of the population is known to account for 80% of treatment. Disease and risk stratification are supported by clinical experience because: (1) some patients do not get disease or disease does not progress after lengthy absences from dental care; (2) most patients have good results from treatment, some much better than expected; and (3) some patients suffer from disease recurrence or advancing disease in spite of the treatment they receive.

Many clinicians believe that they follow the wellness model and can identify elevated risk of disease; however, published studies show that clinicians' assessment and use of risk concepts is not applied consistently, accurately, or completely. This should come as no surprise, as dentists are not trained or experienced in risk assessment, and the literature on this topic only describes risk factors and their relative importance but does not offer a clinically usable method to relate multiple factors. Furthermore, clinicians tend to use disease severity to determine risk. This seems to be a natural bias, as a patient with severe disease is likely high risk; this same patient was, at a prior time, high risk with little evidence of disease. Conversely, it is possible for a patient to be low risk with mild or moderate disease.

In a study spanning 30 years, Axelsson et al<sup>1</sup> provide evidence that a wellness model can result in superior oral health outcomes. The wide-scale application of this method requires a system that provides consistent and accurate quantified information. PreViser has introduced its Oral Health Information Suite (OHIS) specifically for this purpose. The Periodontal Assessment Tool (PAT), a component of OHIS, has been reported to be accurate and valid. Clinical use of these web-based tools is expected to establish a comprehensive database on oral health care, which will increase our knowledge and promote continual improvement in care and outcomes. Preliminary evidence from a retrospective analysis of patients in whom OHIS was used to categorize them by disease state, risk status, treatment, and tooth loss indicates that tooth loss can be reduced by more than 50% when the tool set is used proactively.

It appears that treatment today can be based on accurate, objective, and valid assessment of risk; when this information is used to guide accurate clinical decision making, oral health, clinician productivity, and income will improve, and oral health costs and need for complex therapy will be reduced.

John A. Martin, DDS  
Private Practice, State College, Pennsylvania

### Reference

1. Axelsson P, Paulander J, Svardström G, Kaiser H. Effects of population based preventive programs on oral health conditions. *J Parodontol Implantol Orale* 2000;19:255–269.