Identifying and managing patients' disease risk factors

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Assessing a patient's risk must be an integral part of any clinical examination, specifically when considering the long-term maintenance of the patient's oral health once correction and stability have been achieved. We attend to a patient's immediate need and the main complaint but discount the value of a thorough risk assessment as a long-term investment in a patient's oral and systemic well-being.

A risk factor can be a trait, a habit or action, or an exposure or contact with any entity, process or object that has an association with the development of a particular disease or condition. These may be environmental, behavioral, or biologic in nature and will increase the likelihood that an individual will develop a specific disease. It must be emphasized that risk factors are not always the same as aetiologic factors. Risk predictors or risk markers may be associated with a higher risk for disease development, but do not cause the disease. These should rather be viewed as circumstances, events or conditions that create a favorable scenario for the negative outcome to occur. Risk modification is possible within certain parameters and will serve to lower chances of disease initiation or progression. Examples of modifiable risk factors would include uncontrolled diabetes mellitus, smoking and alcohol use, poor plaque control. Non-modifiable risk factors include genetic factors and age and are often referred to as risk determinants or background characteristics.

Risk factors are commonly associated with several oral diseases and conditions. These include smoking and uncontrolled diabetes associated with periodontal disease, a sugary diet's association to the development of dental caries, and even tobacco and alcohol use with the development of oral squamous cell carcinoma to mention only a few. Whether these risk factors are unique to a particular individual, or commonly encountered in the environment, there is an obligation on the oral healthcare professional to identify these and address these in the best possible way available. This will facilitate the delivery of an optimal treatment plan with accurate prognostication.

It is essential to consider all patient risk factors as a component of the rationale and the scientific basis for developing a sound, evidence-based strategy for controlling oral diseases, both on the individual and community levels. This must include the removal of all risk factors where appropriate, and when not possible, to include behavioral modification where required as well

as interdisciplinary consultation and management for non-modifiable risk factors. The complete and comprehensive patient assessment should not be limited to a brief medical history and extra- and intra-oral examination. Rather, a few more moments should be spared to gather additional data on the patient's background, stressors, socio-economic status and position, familial characteristics to modify treatment plans and prognoses appropriately.

The outcome sought is to lower the disease burden and morbidity rates within the individual as well as the practice and the community it serves. Benefits of the implementation and application of risk assessment tools are apparent to practitioners as enrichment in the identification of the most relevant risk factors, efficiency of communication, as well as patients' education, satisfaction, and treatment acceptance. Similarly, patients may perceive this as improved awareness of the nature and severity of their disease and may advance their intentions to adhere to any instructions received from the practitioner. Once this enhance position of dealing with the disease burden is achieved, the maintenance of all therapeutic approaches should be easier.