

Problem Statement: The number of xerostomia cases has increased greatly over time because people are taking an increased number of medications; there are more than 400 prescription and non-prescription medications associated with xerostomia. Other factors are also involved. In the absence of the protective factors of saliva, a patient becomes more susceptible to oral disease such as caries, candidiasis, and periodontal disease, all of which can result in significant oral care concerns. Thus the major concern for dental healthcare providers is to assess hyposalivation with xerostomia. A hyposalivation with xerostomia screening tool was created for the dental hygienist in dental practice by funding from an Unrestricted Educational Grant provided by GlaxoSmithKline, and utilizes American Dental Hygienists' Association (ADHA) Standards for Clinical Dental Hygiene Practice regarding the assessment, etiology, and management of conditions. The screening tool generates an overall susceptibility to hyposalivation with xerostomia, using a simple grading scale ranging from low to moderate to high risk. Using the assessment and diagnosis clinical parameters, the tool comes to a conclusion or dental hygiene evaluation of risk for hyposalivation with xerostomia that allows for planning and implementation of interventions per risk level of the patient by the dental hygienist and rest of the dental team. The tool was presented to the ADHA members via an article in their Access magazine. Purpose: The validation of the screening tool in a clinical setting. Proposed Method: One effective way to obtain objective measurements of quantitative changes in saliva is by collecting saliva. One hundred participants in a selected clinical setting with the primary symptom of xerostomia would be used in the study. Each participant would first be evaluated using the developed tool by a dental hygienist to determine the participant's risk level for hyposalivation. After the evaluation, first unstimulated saliva would be collected and then stimulated saliva, with both being weighed. Later the participant's salivary flow rate for both the unstimulated and stimulated flow is calculated by dividing the amount (weight) of collected saliva by the duration of the collection period (five minutes). Both the responses to the tool and salivary flow rates for each participant would undergo data analysis in comparison to known values to determine the validity of the tool to adequately evaluate the risk level for hyposalivation.