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Caries Prevention

Caries are one of the most prevalent oral health diseases affecting the United States and other developing countries. It is defined as tooth decay and a crumbling or softening of the tooth. This occurs with a combination of the bacterial flora in a person's mouth and sugary compounds that the bacteria use to produce acid that demineralize the tooth matrix. Prevention of caries is one of the key standard goals for maintaining a healthy oral cavity. This is important in the overall well-being of the patient because it promotes an autonomous causality orientation beginning with positive general health habits. In a consumer nation like the United States and from my own experiences, I believe that dental caries is the most overlooked and reoccurring health crisis and without proper guidance or education on oral health, people are most susceptible to dental plaque and its consequences.

Preventive techniques to promote patient motivation in oral health care are the core principles of a dental hygienist's job duty, taking precedence over clinical services. As a dental hygienist, it is our obligation to assess each patient's needs, plan for interventions, implement plans, perform clinical preventive services such as scaling for calculus and biofilm removal, and evaluate progressive changes for short- and long-term continuing care. To plan and carry out programs for each patient is different in their cases and approach to life, respectively. In a study on a self-determination theory model based on Maslow's hierarchical model of motivation showed that both autonomy causality orientation and autonomy support were positively associated with autonomous motivation for dental treatment, which was positively linked with dental attendance

(Halvari, Anne Elisabeth Münster). For this reason, it is important to remember strategies for improved patient counseling to provide a positive feedback loop that passes through the patient to their families and communities. When having conversations regarding preventive strategies, it is important to remember that the patient is the decision maker and is the key to making a sustainable behavior change. Motivational interviewing is a method of communication that incorporates person-centered, goal-directed communication for eliciting and strengthening intrinsic motivation for constructive change. This means to encourage the clinician and patient to establish a partnership in which the clinician throws out the need to be right, understands, listens, and empowers the patient. This helps when setting an agenda for what information is to be provided as respect for the patient's autonomy to choose what topics to discuss will increase the patient's willingness to listen.

Providing autonomy-support through patient counseling helps prevent morbidity in systemic health as well. Dental caries is the most common dental disease that develops in the oral cavity. The microbiota at times of severe infection can have serious contribution to systemic diseases like infective endocarditis, atherosclerosis, diabetes mellitus, pneumonia, chronic obstructive pulmonary disease, rheumatoid arthritis, and Alzheimer's disease (Sabharwal, Amarpreet). If decayed teeth are left untreated, bacteria will eventually enter the blood stream through the root canal endangering other organ systems in the body. Without preventive counseling, dental plaque will often be undermined by a patient. This will result in a plaque buildup which will harden into calculus which is a harbor for bacteria to nestle into and is impossible to brush away normally. Without proper education and constant awareness, the patient will be especially susceptible to cavities and periodontal disease and thus preventive counseling for caries prevention is a necessary intervention for all patients regardless of prior knowledge.

Preventive counseling and techniques differ when dealing with children and adults because adults have a higher cognitive ability whereas children are still developing theirs. In preventive counseling for adults, it is best to educate the patient in at-home oral health care methods, nutrition/diet information, and smoking cessation. At-home oral health care includes proper brushing methods, flossing techniques, benefits of mouth rinsing, and possible fluoride application. Approaches for the education of the patient's diet and its effect on their oral cavity as well as smoking habits will be different for each individual in order to provide accurate empathy, absolute worth, autonomy support, and affirmations. Exploring a patient's ambivalence with open ended questions, affirmations, reflective listening, and summary about changing health behaviors is an important skill to use when dealing with adults as it will lead to their ultimate decision to determine whether the benefits of changing their health behaviors are worth it or not. Paired with the OARS method, the clinician may use a pro-con matrix to help the patient in exploring their decisional balance with a readiness ruler from 1-10 to elicit the patient's ideas for change. In children this is quite different as they are experiencing new things in their lives and still making sense of the world around them. Motivational interviewing can still be utilized to explore ambivalence or elicit change talk depending on the age and self-care ability of the child but in this case, working together as a team with the caregiver. A study on the promise of a prize if children scored lower on a plaque index on a following visit has shown that children may be susceptible to a prize if they follow through with hygiene instructions (Ferrazzano).

Caries prevention, periodontal disease management, and nutritional counseling all correlate with each other and are the foundation of reason for patient motivation. I have learned from this assignment the essence of being a dental hygienist. It is to encourage oral health in our communities through preventive techniques created in the patient's truly best interests. In learning and understanding these core foundations, I feel like I have taken my first step into the

reality of being a health care provider. It has enabled me to be confident in my ability to provide and discuss preventive measures for another person's well-being through motivational techniques and education. By supporting a patient's autonomy in oral health care, I am also supporting their general health by stimulating intrinsic motivation and thus fulfilling my duty as a healthcare provider.

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