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Diabetes Care & Wellness

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Introduction

Diabetes mellitus (DM) and periodontal disease (PD) have a bi-directional relationship. The risk and severity of PD is increased by 2-3-fold in PWD. Individuals with PD also have a 50% increased risk of developing DM. Oral health is not often addressed in DM care.

PD is characterized by chronic inflammation and accumulation of bacteria involving the gingiva and alveolar bone. Prolonged hyperglycemia, associated with DM, causes inflammation which impairs gingival health. With every 1% increase in HgA1c, the risk of PD increases by 18%. DCES can create strategies to implement in practice for PD prevention to help bridge the gap in diabetes management and ameliorate outcomes.

Diabetes & Periodontitis

- ↑ Rates of CVD, retinopathy, & neuropathy
- ↑ Diabetes-related deaths
- ↑ Incidence of depression
- ↓ Quality of life

Signs & Symptoms

- Red, swollen, & tender gums
- Edentulism (evidence of loss of teeth)
- Diastemas (teeth spreading and open spaces)
- Bleeding gingival (gums)
- Chronic halitosis

Figure #1¹



Figure #2³



Possible Barriers in Oral Health

- ↓ Perception of the importance of oral health
- ↓ Knowledge of signs and symptoms
- ↓ Communication between medical and dental professionals
- ↓ Health literacy and knowledge of the connection of DM and PD
- Limited access to dental care
- Financial restraints and inadequate dental insurance coverage

Benefits of Implementing Strategies

- ↓ HgA1c by 0.6% with PD treatment
- ↓ HgA1c by 1.4% with PD treatment & medication change
- ↓ Healthcare expenditures (\$1700 PP)
- ↑ Access to care
- Improve outcomes

Strategies to Implement

- Inquire about dental exams
- Inform PWD on the need for dental exam
- Educate PWD and clinicians on signs and symptoms of PD
- Encourage regular flossing and brushing with fluoride containing toothpaste
- Educate on importance of carbohydrate reduction
- Encourage smoking cessation
- Encourage to assess for signs and symptoms
- Recommend a periodontal assessment for newly diagnosed patients
- Implement protocols into practice for dental referrals

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