Perceived connections between oral health and stress among pregnant women: A study in Saudi Arabia

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**Background:** Although stress during pregnancy has negative effects on children's development and pregnant women's health, no study has assessed stress and its predictors among pregnant Saudi women.

**Aim:** The aim of this study was to assess the relationship between sociodemographic and self-reported oral health problems and perceived stress in a sample of pregnant Saudi women.

**Materials & Methods:** A cross-sectional study was carried out at King Abdulaziz Medical City in Riyadh, Saudi Arabia, on 438 pregnant women who attended the obstetrics/gynecology clinic. We collected data on their sociodemographic and oral health status. Stress was assessed using the perceived stress scale.

**Results:** 33.4% of the sample reported high stress. The study revealed significantly high stress in women with no or low income, chronic disease, sleep deprivation, no teeth brushing, irregular eating patterns, gestational diabetes, and no family support (P < 0.05). Self-reported oral health problems were significantly associated with high stress (P < 0.05). A multiple linear regression model shows no teeth brushing, chronic disease, sleep deprivation, gestational diabetes, and gingival redness predicted an increase in stress by (3.6, 2.4, 2.1, 1.4, and 1.4, respectively).

**Conclusions:** It was estimated that 3 in 10 pregnant women in our hospital reported high stress levels. Our study shed light on the relationship between healthy habits, oral health status, and perceived stress in pregnant women. This research may help healthcare practitioners who provide care to pregnant women to educate them in regard to healthy habits, and to develop a program to reduce stress.

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Effect of *Aggregatibacter actinomycetemcomitans* from Aggressive Periodontitis patients on *Streptococcus mutans*

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**Objectives:** To determine in vivo association between *Aggregatibacter actinomycetemcomitans* (Aa) and *Streptococcus mutans* (Sm) in aggressive periodontitis patients (AgP) and the in vitro influence on Sm of saliva and of Aa strains isolated from individual Aa-positive patients.

**Materials and Methods:** Clinical indices and saliva samples were taken from 30 AgP patients. Aa and mutans streptococci levels were determined. Antibacterial effect of saliva from 12 Aa-positive patients, and their individual Aa strain, was checked turbidimetrically in vitro on Sm.

**Results:** Aa salivary level was inversely correlated with levels of mutans streptococci and directly correlated with pockets of ≥7 mm. During exponential growth phase: (i) All Aa-positive and Aa-negative saliva samples showed no significant influence on Sm growth. (ii) Each individually isolated Aa strain presented significant inhibitory effect on Sm growth. During stationary growth phase, all the above demonstrated an inhibitory effect on Sm growth, with significantly greater influence of Aa individual strains.

**Conclusion:** Saliva of each AgP Aa-positive subject had an inhibitory effect on Sm growth, which is most likely derived from Aa bacterial physiology. This research raises the possibility that suppression of Aa due to periodontal treatment may increase Sm levels and hence caries incidence.

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