

Parents reported the SDF application was easy, were comfortable with the discoloration of the teeth, and had children who accepted the painlessness of the procedure and the taste of the SDF. Child behavior did not correlate with subjective parent feelings.

DISCUSSION

SDF proved effective in arresting active caries lesions in the primary teeth of preschool children. Parents were accepting of the

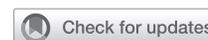
process and felt it was easy, effective, and without objectionable attributes.

Clemens J, Gold J, Chaffin J: Effect and acceptance of silver diamine fluoride treatment on dental caries in primary teeth. *J Public Health Dent* 78:63-68, 2018

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PERIODONTAL DISEASE

Noise and periodontitis



BACKGROUND

Periodontitis is a chronic inflammatory disease that results from pathogenic bacteria interacting with the host's immune response. It's common throughout the world, particularly among adults. It may be an early indicator of systemic inflammatory diseases and is associated with a number of risk factors. Noise exposure is an occupational hazard that affects many workers worldwide. It can lead to impaired hearing, sleep disturbances, psychological stress, and cardiovascular diseases. Noise serves as a psychological stressor that can alter the immune system and could generate reactive oxygen species and proinflammatory cells, which can lead to inflammation of various types. It was hypothesized that noise exposure at work could affect the development of periodontitis. The link between excessive noise exposure in the workplace and periodontitis was investigated in a representative sample from the 4th Korea National Health and Nutrition Examination Survey (KNHANES IV) 2007 to 2009.

METHODS

A total of 8927 workers age 19 to 54 years were included in the study sample. Self-report questionnaires were used to determine noise exposure. Other covariates that were tracked included age, sex, perceived stress level, place of residence, income, education, health behaviors, diabetes, obesity, and white blood cell (WBC) count. The association between noise exposure and periodontitis was evaluated using logistic regression analysis.

RESULTS

Of the 8927 participants, 29.3% were exposed to occupational noise. The exposed workers' average age was 38.2 years and most (59.2%) were men. Compared to workers who were not exposed, the exposed workers were more likely to be older, experience greater stress levels, live in rural areas, have lower income, receive less education, brush their teeth less frequently, binge drink, and smoke. Exposed workers also had a higher

WBC count, tended to have diabetes, and were more likely to be obese. Most were blue collar workers rather than white collar workers. Mechanics in particular had a high likelihood of being exposed to excessive workplace noise.

When the relationship between noise and periodontitis was evaluated, a significant relationship was seen between occupational noise exposure and periodontitis in exposed workers who had a severe problem with noise compared to those not exposed. The exposed workers age 45 years or younger were significantly more likely to have periodontitis than exposed workers in other age groups.

DISCUSSION

Exposure to occupational noise was shown to be significantly related to periodontitis in these Korean workers. The association remained significant even after adjusting for all of the demographic and socioeconomic factors, health behaviors, and medical problems assessed in this study.

Clinical Significance

It's important to address the problem of excessive occupational noise if we want to manage modifiable risk factors for periodontitis. We still need some longitudinal studies to further define the relationship between the environment of workers and the likelihood of developing periodontitis.

Shim S-H, Han D-H: Exposure to occupational noise and periodontitis in Korean workers. *J Periodontol* 89:431-439, 2018

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