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**A STUDY OF DENTAL HEALTH IN WORKERS EXPOSED TO
OCCUPATIONAL VIBRATION**

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Relevance. Clinical picture, diagnostics and treatment of abnormalities of organant tissues of the oral cavity in vibration disease (VD) have been analyzed by numerous studies, although their results cannot be considered regarding the improvement of dental (V.M. Retnev, 2007, T. V. Nikitina, 2003). At the same time, workers who are exposed to occupational vibration tend to have high rates of morbidity, preeminently of periodontal diseases, which are regarded as part of vibroperiodontal syndrome (VPS). VPS is characterized by multiple forms of symptoms, severe course, resistance to therapy, tendency towards complications and relapses and also by dental health (DH) disturbance even after the cessation of exposure to vibration (A.M. Kovalevskiy, 2005, V. A. Kapustnik, 2002-2011).

Objectives: the aim of the research was to substantiate and select methods of dental health in workers who are exposed to occupational vibration.

Materials and methods. The research included 129 male patients with VD (63-degree; 66 – degree of VD), who were treated at specialized department of occupational health clinic of Kharkiv National Medical University (V.A. Kapustnik, I.F. Kostyuk, 2009). DH was assessed according to the method of K.M. Kosenko (patent 57512, Ukraine, 2011) among in-patients and control group persons (when rendering medical examination) with the employment of papillary-marginal-alveolar index (PMA), oral hygiene index (-S), intensity of caries involvement (CII), with determination of vacuum pressure strength of gingival capillaries (according to V. I. Kulazhenko) and community periodontal index of treatment needs (CPITN). Preliminary materials have been statistically processed with reliability determination by paired t-test.

Results of the research. The indices in VD- degree have been found to be higher, as opposed to VD- degree, in particular, indices (correspondingly, $(47,0 \pm 1,2)$ and $(55,4 \pm 1,1)$ %., $0,05$), intensity of caries involvement ($0,05$) and a decrease in

frequency of vacuum pressure strength of gingival capillaries ($p < 0,05$) in relatively similar rates of oral hygiene index ($p < 0,05$). It has been determined that patients with VD-degree periodontal treatment need was significantly higher ($p < 0,05$), than in VD- (fluctuated in the range from 1,8 to 3,0 points); the above mentioned factors determine the requirement of personalization of dental treatment strategies regarding patients with VD. Stratification of persons exposed to occupational vibration by groups of preventive and treatment –diagnostic activity is a possible strategy of such personalization, which can help fully determine the needs of the patients and personalize dental care in the system of specialized treatment.

Conclusions. Dental health assessment among workers who are exposed to occupational vibration is a topical dental care issue, as the influence of occupational factors has a systemic character and results in VPS; it requires elaboration of patient-oriented programs for prevention and treatment. The obtained data regarding CPITN indices determine the priority ranking of periodontal diseases prevention in the united system of medical and preventive measures among the persons who are exposed to occupational vibration.