

postures and movements causing unnecessary musculoskeletal loading, discomfort, and fatigue. Occupational diseases have not only physical, psychological, and social consequences, but also economic and security impacts when they reach a level of severity that directly affects work capacity, causing absences and premature retirement.

Aim of study. The aim of this study was to determine the prevalence and risk factors of musculoskeletal disorders among dental professionals.

Materials and methods. A self-developed questionnaire was distributed to 82 dental workers to collect information about musculoskeletal disorders symptoms and relevant factors. Their working posture was studied through the ergonomic method REBA.

Results. The research sample was formed by 66.7% general dentistry and 33.3% dental surgery. From the questioned workers, 95.12% complained about at least one specific MSDs symptom and 4.87% of them complained about all the symptoms listed in the questionnaire (upper limb, throat, back and legs, general fatigue). Muscle and joint pain manifestations in hands present 70.70% of the dental workers, 68.30% - in the neck, 58.50% - in the shoulders. Four out of ten dentists suffered pain in the neck and shoulder region for more than a year, and every second of them suffers from hand pain for several years. Fortunately, most dental professionals characterize their pain as an intermittent one and only two out of ten as a permanent but bearable one. According to the ergonomic REBA method, 7.30% of staff and are at medium risk of MSDs and their workplace requires changes, 41.50% - a high level of MSDs risk and the workplace design needs to be adapted to the worker as soon as possible, and 51.2% of those observed are at a very high risk, in these cases the improvement of the design of the workplace and the furniture/equipment must be carried out urgently.

Conclusions. The physical load, including vicious posture, among dentists puts them at risk for the occurrence of musculoskeletal disorders. An ergonomic intervention is needed to decrease the prevalence of work-related musculoskeletal disorders among dental professionals.

Key-words: dental professionals, musculoskeletal disorders, ergonomics, REBA.

219. THE MUNICIPAL PUBLIC TRANSPORT MICROCLIMATE IN CHIȘINĂU

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Introduction. At the moment, public transport in Chișinău has a very important role, especially trolleybuses. Every day around 300 units are circulating in Chisinau carrying about 50 thousand passengers.

Aim of the study. The problem of the working conditions of drivers and passengers in transport is insufficiently studied.

Materials and methods. We measured the microclimate parameters in the trolleybuses from Chișinău with the device Meteoscope M, basic indicators such as air temperature and relative humidity, the current velocity being considered constant 0.1 m / s, according to the norms. Three sets of measurements were performed in order to record the transition from autumn to winter which included 40 electric cars per day, and then the Sigma method was used in order to analyze the statistical average of the measurements. The quality index of the microclimate was evaluated, namely the Actual Temperature. Then these results were compared with the regulatory framework in the given domain.

Results. We compared the results of the Actual Temperature with European regulatory framework nomograms in the field of occupational health and environmental health (89/654/EEC and FRR 2.2.2006-05; RNI 2.2.4.548 -96) and we determined that the actual

temperature exceeded the minimum required in 2 cases. In October the index of actual temperature falls within the normal range, and in December and February it doesn't reach the normal minimum 18 ° C.

Conclusions. This fact speaks about very cold working conditions during the cold season of the year, and as a result one might experience different diseases of the respiratory, urinary or cardiovascular system and many more. It is recommended that the worker wear warm clothing, work breaks, the organization of a special diet.

Key words: microclimate, working conditions, actual temperature, trolleybuses, public health.

220. MICROCLIMATE STATUS IN CITY HOSPITALS

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Introduction. The room microclimate is determined by the temperature and air humidity, air currents. All the factors microclimate acts both combined and concurrently on the human body. So, microclimate acts over the thermal comfort (TC). According to the British BS EN standard ISO 7730, TC is "condition of the mental state that expresses satisfaction with the surrounding environment". In the hospital there is a constant flow of people who are influenced by the inside of the microclimate. Legg (1971) has suggested that there are four categories of ward user to be considered. First, there are patients who are involved in a minimum activity. Secondly, there are the nursing and medical staff who carry out a little physical exertion. Thirdly, domestic staff who do a lot of physical work. Finally, are visitors and staff from other hospital who are only in the ward for a short time. The deviation of the microclimate indicators will influence all categories of people working inside the wards. At 21 °C, the influenza virus is least likely to survive between 40%- 60%rh. Bacteria will have a decreased growth rate at less than 25%rh but will have higher growth at 90%rh or above. Mold is most likely to reproduce at a rapid rate over 60%rh. Between 30%- 50%rh is ideal for controlling and reducing mold growth. Relative humidity can either hinder or help propagate infectious agents like viruses and bacteria. It can affect the spread of other irritants like mold that can trigger allergic reactions and asthma attacks.

Aim of the study. Determination of the microclimate status in the city hospitals.

Materials and methods. Microclimate assessment is performed on the basis of sanitary and hygienic norms. For maintaining a favorable microclimate in a hospital wards, have been elaborated „Regulament sanitar privind conditiile de igiena pentru institutiile medico-sanitare” HG nr. 663 from 23 July 2010. Compliance of these sanitary-hygienic conditions contributes to maintaining a thermal comfort of the patients in the different wards.

Results. According to HG nr. 663 from 23 July 2010 „Regulament sanitar privind conditiile de igiena pentru institutiile medico-sanitare”, Chapter 6 provides requirements for heating, ventilation, microclimate and room air quality. Paragraphs 148 provides „The heating, ventilation and air conditioning system must ensure optimal microclimate conditions and proper chemical component of the indoor air.” Paragraphs 149” The temperature, the multiple of the air exchange will correspond to the indications established by the sanitary regulations.” Paragraphs 155 provides „water in central heating systems is used with a maximum temperature in convectors of 85 °C.” Paragraphs 168 provides” The relative humidity of the air will not exceed 60%, the velocity of the air movement - 0.15 m / sec”.

Conclusions. The monitoring of the microclimatic regime in the hospital wards will be carried out.

Key words: hospital, microclimate, hygienic norms, monitoring