

PREFACE

BIOLOGICAL ASPECTS OF SELECTED DISEASES IN EUROPEAN POPULATION

This Supplementum of the Central European Journal of Public Health brings new scientific knowledge and results regarding studies focused on the prevalence of some diseases in medical staff in the selected location of eastern Slovakia in connection with the COVID-19 pandemic, as well as the health status and hygienic behaviour of pregnant women in Hungary during this period. Other scientific works report the results concerning the serious civilisational disease diabetes mellitus type 2 from the point of view of the association of biochemical markers and the genotype of the VDR gene, the influence on the occurrence and course of diabetic retinopathy and bring a pilot study focused on the qualitative analysis of dermatoglyphic patterns in relation to the given disease with the possibility of their use in preventive diagnostics.

From the point of view of assessing the health status of the population, regular monitoring of selected anthropometric and biochemical parameters is essential, followed by a personalized approach to the design of preventive measures in case of disease and therapy. Finding the genotypic status of patients or polymorphism analysis of selected genes that are related to hypothyroidism, ischaemic heart disease, obesity, and cardiovascular diseases is an important part of correct diagnosis and subsequent therapy.

Cytogenetic analysis was performed on workers in the coke industry, as they are among those with above-average workloads due to the work environment. Cytogenetic analyses allow detection of chromosome aberrations, changes in the number of chromosomes, the presence of abnormal chromosome parts, etc. An interesting study that brings new knowledge is the evaluation of the shape of the arch of the foot in connection with the health status of the adult population from Slovakia.

Currently, the incidence of sleep disorders is increasing among children of preschool age, therefore, it is important to know their sleeping habits and influence them in time so that this serious problem does not develop into severe sleep disorders and insomnia. A healthy and sufficiently long sleep is necessary for the regeneration of the organism from a functional and morphological point of view.

Health literacy and awareness of patients' rights among mothers of ethnic Hungarians in Eastern Europe is a topic that has recently resonated in various regions of Europe and the world in connection not only with the minority population but also with migration flows, which also include pregnant women and mothers with children.

Research activities and results of individual scientific works focus mainly on biological, biochemical, molecular-biological, and cytogenetic aspects of selected diseases with an emphasis on prevention and the health status of the population. Selected biological aspects of individual diseases represent a comprehensive approach in the prevention and early diagnosis of these, often serious, diseases. This approach may be used as an additional screening and prevention tool with potential to predict the expectance of disease. It can serve as a helpful mechanism to select individuals from a larger population for further investigation to confirm the possibility of disease onset.

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