International Journal of Occupational Medicine and Environmental Health 2007;20(2):III–IV

EDITORIAL

In this issue of the *International Journal of Occupational Medicine and Environmental Health* we present eight original papers, the 2006 Polish bibliography of occupational medicine, and the report on the workshop held in the Institute of Occupational Medicine, Łódź, devoted to the ototoxicity of organic solvents.

In recent years, the prevalence of work-related asthma has increased. However, risk assessment of occupational exposure to allergens is difficult since the relationship between exposure, sensitization, and symptoms has not yet been fully established. *A. Korpi et al.* proposed a systematic and comprehensive approach to assessing and managing allergen risk at workplaces. This approach relies on the cooperation and active communication between management, employees, and health care personnel during the whole process. This multi-faceted approach encompasses several risk assessment techniques and reveals the prevalence of work-related allergic symptoms.

W. Jędrychowski et al. investigated the potential influence of house-dust mite (HDM) allergens and indoor air quality on the risk of wheezing among three-year-old children. House-dust samples were collected in 275 dwellings from mattresses, children's bedrooms and kitchen floors. The adjusted incidence rate ratios (IRR) of wheezing ascribed to the HDM level > 2 μg/g dust were 1.84 for duration of wheezing and 1.56 for episodes. The obtained results support the view that exposure to a higher level of HDM allergens increases the burden of respiratory diseases in early childhood and the effect is independent of maternal atopy, environmental tobacco smoke, and moulds in homes.

A.P. Kurmis and S.A. Apps present a review on occupational noise-induced hearing loss (ONIHL), an acquired hearing deficiency attributable to excessive workplace noise exposure. The authors conclude that despite a high level of public awareness regarding the importance of hearing preservation and increasingly stringent international occupational health, safety and welfare requirements, ONIHL continues to be a significant occupational hazard. ONIHL is permanent and may cause significant disability, for which there currently exists no cure, but is largely overtly preventable. Exposure-avoidance strategies aimed to reduce the incidence of ONIHL remain the focus of public health and occupational medicine approaches.

Occupational exposure to azo dyes was in the past the cause of bladder tumors among industrial workers. The results of investigations performed by *M. Guerbert et al.* in chemical plant that produces dichlorobenzidine and azo dyes suggest that at present exposure is very low and some minor industrial hygiene problems could be easily solved to improve working conditions of the employees.

M. Trzcinka-Ochocka et al. Carried out study to determine mercury in urine (Hg-U) in the group of persons employed in dental surgeries and in the control group. Contrary to the results published in the past no statistically significant differences were found in geometric mean of urine mercury concentrations between the study and control groups. The reliability of mercury determinations was verified via participation in the external quality assessment scheme. Among different factors affecting Hg exposure in dental surgeries only the duration of dental practice showed a statistically significant influence on total Hg-U.

P. Jałowiecki and B. Janasik were first to propose physiologically-based toxicokinetic model (PB-TK) of durene and isodurene. The developed model was validated against experimental data obtained as a result of an 8-h exposure of volunteers to durene and isodurene vapors of 10 and 25 mg/m^3. Simulations of one working week inhalation exposure indicate that the elaborated PB-PK model may be used to predict the chemical distribution in different body compartments based on physicochemical properties.

M. Szyszkowicz examined the associations between emergency department (ED) visits for ischemic hearth disease (IHD) and short-term elevations in ambient air pollutants

(CO and NO_2). The short-term effects of nitrogen oxide and carbon monoxide were associated significantly with daily ED visits for ischemic hearth disease. For NO_2 the associations were stronger in patients aged over 64 years. The author suggest that vehicular traffic, a producer of NO_2 and CO, contributes to an increased number of ED visits for IHD.

Burden of diseases attributable to low physical activity is increasing worldwide mainly among working-age populations. *D. Kaleta and A. Jegier* evaluated the association between selected (including demographic and socioeconomic) factors and leisure-time physical activity. They found that low number of physically active working-age citizens is a challenge for public health, and it confirms the need for promoting active lifestyles. Effective strategies to encourage leisure-time physical need to be targeted at specific age and socioeconomic groups.

M. Śliwinska-Kowalska et al. presented a summary of sessions and subsequent discussions held during a workshop organized by the Nofer Institute of Occupational Medicine under the 6th European Framework Project Marie Curie Host Fellowship for the Transfer of Knowledge "Noise Hear" (Łódź, Poland, 15–16 November 2006). The main objectives of the workshop were to present existing substantial scientific evidence, to highlight gaps in knowledge of organic solvent ototoxicity alone and in combination with noise, and to discuss the links between isolated exposure to organic solvents, combined exposure to noise and solvents, and their effects on the auditory system.

Presenting this issue of the *International Journal of Occupational Medicine and Environmental Health* we would like to encourage our readers to join the group of its authors and send their contributions to enrich the contents of the oncoming issues of the Journal.

Editors