

complained and the main problems were air pollution (86.6%). The concentrations of Benzene, Toluene, Xylene and Ethylbenzene in the nearby communities were in the ranges of <0.001-1.097ppm, <0.001-1.182 ppm, <0.001-2.388 ppm and <0.001-0.045 ppm, respectively. The concentrations of concerned VOCs in the nearby communities (within 10 meters) were related to the concentrations of VOCs in the garages with the correlation coefficients of 0.64, 0.49, 0.40, and 0.22 for Toluene, Benzene, Xylene and Ethylbenzene, respectively. The concentrations measured in the nearby communities were compared to the order threshold limit, the results indicated that all concentrations were not exceeded the order threshold. However, there were many factors related to the measured VOCs concentration.

Oral Track 26- Occupational & Environmental Health

OT26-1

Association between Arsenic Level in Drinking Water with Skin Disorders in Buyat Village North Sulawesi Indonesia

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Objectives: Arsenic contamination of groundwater is a severe public health crisis in Buyat Village Kotabunan Sub-district, Bolaang Mangondow Regency, North Sulawesi Province Indonesia, where the population is exposed to arsenic in drinking water through tube wells used for groundwater collection. In this study, we explored the association between Arsenic levels in drinking water with skin disorders on Buyat Communities.

Methods: We used baseline data from subject 86, which as 43 case and 43 control who were recruited into the Health Effects (Skin disorders). This study was Case control study on the health effects of arsenic exposure from drinking water in Buyat Village. We conducted analyses with Chi-Square and Odd Ratio.

Results: We found a strong dose-response association with all measures of arsenic exposure in drinking water and skin lesions. Arsenic levels in drinking water from tube well of Buyat Village was about 0.01-0.10 mg/L (average 0.056 mg/L). A significance was observed between Arsenic levels in drinking water and skin disorders with $p=0.017$ (Odd Ratio = 2.87, 95% CI: 1.194-6.934).

Conclusions: Our study provides insight into potentially modifiable host characteristics and identifies factors that may effectively target susceptible population subgroups for appropriate interventions.

OT26-2

Special Subject of Assessing the Environmental Burden of Disease and Economic Lost in Vietnam in 2008

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Vietnam is one of developing countries in Asia area that be worst sustainable development of environment because of rapid process of urbanization and industrialization. This special subject is in framework of project named "Investigating, statistic and assessing the effect of polluted environment on community health and proposing solutions aim to reduce pollution and recommend to public in 2008" by the Vietnam Environment Administration. Materials and methods: Using industrial pollution projection system (IPPS) developed by the World Bank, method of assessing the Environmental Burden of Disease (EBD) and economic lost caused by polluted environment developed by WHO. Results: The indicator of EBD from unsafe water, sanitation and hygiene in provinces in the Mekong River Delta and South East area is higher than the others, while result of assessing the EBD from indoor air pollution in North East area is highest in nationwide. In 2007, on averaged 1000 people in North East, it would be losted 20 years of healthy life due to premature mortality and time lived in states of less than full health caused by indoor air pollution, is double the whole country average. The EBD indicator from developed industrialization provinces such as HaTay, HaiPhong, DongNai, BinhDuong, DaNang... is higher than from underdeveloped provinces. An outstanding point is although the EBD indicator from unsafe water, sanitation and hygiene make up very limited percentage of total EBD from three polluted environment factors (approximately 1%), the economic lost caused by them is quite high percentage, about 46% of total lost of nation.

OT26-3

Stress and Satisfaction among Healthcare Professionals: A Survey Finding

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This cross-sectional postal survey examined stress among doctors in a teaching hospital at the University of Malaya Medical Center, Kuala Lumpur, Malaysia. The Pressure Management Indicator (PMI) was utilized in the study. This 120-item self-report questionnaire measures job satisfaction, mental and physical health, pressure, individual differences, coping, and social support based on a 6-point Likert scale. The higher the score, the higher the satisfaction or stress. Some 220 (47.3% response rate) doctors participated, consisting of 36 consultants (16.4%), 41 lecturers and trainees (18.6%), 90 medical officers (41%), and 53 house officers (24%). Significant differences were shown between the various groups in terms of job satisfaction ($p=0.001$),