

attending three-year residency training or by five-year working experience in the field of occupational medicine including an elective two-month short course. Occupational medicine is a prevalently attractive specialty-training program among Thai physicians.

As a country which occupational medicine training program is in its childhood period, lessons learned from prior occupational medicine developed countries, updating contents and employers' demand is the key to success. In Thailand, occupational physician supply is still less than the increasing demand. Additionally, the study among the majority of Thai working populations in the informal sector, particularly in agriculture, and the advancement of current health research schemes would strengthen the training. These are future challenges influencing the progression of occupational medicine training in Thailand.

## Oral Presentation

### Specific Occupations

#### 0049 A COHORT STUDY OF JOB STRESS AND FATIGUE ON HEALTH PSYCHOLOGY AMONG PROFESSIONAL DRIVERS

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**Background** Long-term effects of work-related factors on risk of psychiatric disorders among professional drivers have not been conclusive. A follow-up study was conducted to evaluate the individual and combined effects of stress and fatigue on drivers' risk of developing psychiatric disorders.

**Methods** The Taiwan Bus Driver Cohort Study (TBDCS) recruited 1650 professional drivers from a large bus company in 2005. The subjects were interviewed in person and completed two scales of job stress- the Demand-Control-Support model (DC) and Effort-Reward Imbalance model (ERI), and one job fatigue model- Swedish Occupational Fatigue Inventory (SOFI). Psychiatric diseases were the outcomes of this study, including substance abuse, anxiety, mood, and sleep disorders. Cox proportional hazards model was used to estimate the hazard ratio (HR) for psychiatric disorders.

**Results** Between 2006 and 2012, 108 bus drivers were diagnosed as having psychiatric disorders. Neither DC nor ERI score was associated with psychiatric disorders risk. Drivers with high SOFI (>3.5) had an elevated risk for psychiatric disorders, adjusting for age, BMI, marriage status, education, drinking, smoking, exercise, sleeping pills, bus driving experience and shift work (HR: 2.02, 95% CI: 1.37 to 2.99; p=0.025). Among psychiatric disorders, those having anxiety or mood disorders were related to high SOFI in 2005.

**Conclusion** Among professional drivers, occupational fatigue as indicated by high SOFI might have predicted higher risk of psychiatric disorders, especially anxiety or mood disorders.

## Oral Presentation

### Other

#### 0050 WORKING TOWARDS ASSESSING OCCUPATIONAL CARCINOGENIC EXPOSURES IN AN AFRICAN LOWER AND MIDDLE INCOME COUNTRY

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**Aim** We aim to use the Canadian CAREX (CARcinogen EXposure) tool, adapted for local context, as a method to assess prevalence and level of exposure to priority occupational carcinogens in South Africa.

**Methods** The work entails first understanding the CAREX tool, and adapting it as well as reviewing its use in other countries (phase 1). Once the tool and database are prepared, we will gather publicly available data (i.e. Census data, information on chemical use, trade data, published and grey literature, expert consultation, etc.) on occupational exposure to carcinogens as well as exposure monitoring data (phase 2). We will consider all occupational health and safety legislation and its regulations regarding occupational exposure limits, and those carcinogens prioritised locally and internationally, for example by the International Agency for Research on Cancer. All data will be used to estimate the number of South African workers occupationally exposed to carcinogens (and where possible, their level of exposure) (phase 3). Ultimately, this will help guide the development of appropriate health promotion and worker protection programmes, among other resources aimed at cancer prevention (phase 4).

**Results** Here we will present the experience of the team during phase 1 of the project, including challenges and opportunities encountered.

**Expected outcomes** Key future outcomes include prevalence of exposure to occupational environmental carcinogens in the South African workplace; also proportions of the workforce in various occupational groups exposed to specific carcinogens; key occupational groups in need of protection; data and information that can be used to guide prevention programs.

## Poster Presentation

### Exposure Assessment

#### 0051 ESTIMATING WORKER EXPOSURE TO SOLAR UV RADIATION IN SOUTH AFRICA BY POSSIBLE EXTENT AND OCCUPATIONAL GROUP

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