randomly selected schools and survey was conducted for all teachers in these schools during July to August 2016. Probable depression was defined as a CES-D score of 16 or more and definite depression was defined as a score of 25 or more.

Results 1617 out of total 3345 in 79 schools responded to the survey. Except for those who were missing information, 1123 teachers were included this analysis. Compared with the general population, teacher's prevalence of probable depression was higher in the 30 s and 40 s (28.99% vs 22.29%, 26.46% vs 20.87%, respectively) and definite depression was higher in the 20 s, 30 s and 40 s (15.38% vs 10.07%, 14.01% vs 8.08%, 10.46% vs 7.57%, respectively). In the case of high school homeroom teacher, the 3rd grade homeroom teachers had a higher rate of depressive symptoms than the 1st and 2nd grade homeroom teachers (probable depression: 39.56% vs 26.95%, definite depression 17.58% vs 11.98%).

Conclusion This study was the first to investigate the prevalence of depressive symptoms among teachers in Korea. Workers are generally known to have a lower risk of depression than the general population, but teachers have found the opposite result. The resolution of teacher's mental health problems are almost entirely up to the individual teacher. Taking into account the impact of teacher mental health on individuals, students and schools, structural intervention is urgently needed.

1485 PREVALENCE OF AND FACTORS ASSOCIATED WITH BURNOUT AMONG HEALTH CARE PROFESSIONALS IN ARAB COUNTRIES: A SYSTEMATIC REVIEW

¹I Elbarazi, ^{1,2}T Loney*, ³S Yousef, ¹A Elias. ¹Institute of Public Health, College of Medicine and Health Sciences, United Arab Emirates University, Al Ain, PO Box 17666, United Arab Emirates; ²Mohammed Bin Rashid University of Medicine and Health Sciences, PO Box 505055, Dubai, United Arab Emirates; ³Department of Psychiatry and Behavioural Science, College of Medicine and Health Sciences, United Arab Emirates University, Al Ain, PO Box 17666, United Arab Emirates

10.1136/oemed-2018-ICOHabstracts.1742

Introduction Burnout among healthcare professionals is one of the key challenges affecting health care practice and quality of care. This systematic review aims:

1. estimate the prevalence of burnout among health care professionals (HCP) in Arab countries; and
2. explore individual and work-related factors associated with burnout in this population.

Methods Multiple electronic databases were searched for studies published in English or Arabic from January 1980 to November 2014 assessing burnout (using the Maslach Burnout Inventory; MBI) amongst health care professionals (HCP) in Arab countries.

Results Nineteen studies (n=4108; 49.3% females) conducted on HCP in Bahrain, Egypt, Jordan, Lebanon, Palestine, Saudi Arabia and Yemen were included in this review. There was a wide range of prevalence estimates for the three MBI subscales, high Emotional Exhaustion (20.0%–81.0%), high Depersonalization (9.2%–80.0%), and low Personal Accomplishment (13.3%–85.8%). Gender, nationality, service duration, working hours, and shift patterns were all significantly associated with burnout.

Conclusion Within the constraints of the study and the range of quality papers available, our review revealed moderate-to-high estimates of self-reported burnout among HCP in Arab

countries that are similar to rates in non-Arabic speaking westernised developed countries. In order to develop culturally appropriate interventions, further research using longitudinal designs is needed to confirm the risk factors for burnout in specific HCP settings and specialties in Arab countries.

448 ASSESSMENT OF PSYCHOSOCIAL RISKS AND WORK ABILITY AMONG SEAFARERS

¹B Matulić*, ²N Varljen, ³M Matulić, ⁴M Mustać, ²A Šimundić, ⁵M Milošević. ¹University of Zagreb, School of Medicine, Zagreb, Croatia; ²Occupational medicine clinic, Rijeka, Croatia; ³Occupational health service institute Benedikt, Split, Croatia; ⁴Occupational medicine clinic Mate Mustać, Zadar, Croatia; ⁵University of Zagreb, School of Medicine; WHO Collaborative Centre for Occupational Health, Croatia

10.1136/oemed-2018-ICOHabstracts.1743

Introduction Work conditions have a great impact on the work ability of a seafarer, whether it is about relationship with superiors, working conditions or job description. Ability to accomplish tasks is also very important sign of wellbeing of a worker. As seafarers face a wide range of psychosocial stressors on board, they may be vulnerable to develop burnout syndrome. The aim of this study was to determine influence of different psychosocial risk factors on seafarers work ability.

Methods Field study among seafarers in Croatia was performed from December 2016 until February 2017. Questionnaires regarding burnout, workplace stress levels, work ability index (WAI) and socio-demographic questions have been administered to 222 seafarers in three different cities on the Adriatic coast (Rijeka, Zadar and Split). Response rate was 100% giving a total number of 222 participants. Statistical analysis was performed with IBM SPSS Statistics version 24 and all P values below 0.05 were considered significant.

Result All included seafarers were men with average age of 43.11±11.39 years. Thirty-eight seafarers (17.1%) had unsatisfactory WAI score (≤36) with very high priority of adequate preventive measure in work ability preservation. Pressure at work, uncertainty of work and boredom were most prominent workplace stressors. High burnout level had near 4% of all participants (8/222) and 51 (22.9%) had initial stage of burnout. Binary logistic regression showed that higher burnout level is most significant predictor of low work ability (OR=11.3; 95% CI: 3.3 to 38.8; p<0.001) controlled for age, education level, work tenure, job type and other workplace stressors.

Discussion Results have shown that the prevention of burnout syndrome should be done as soon as possible to maintain adequate work ability. The most vulnerable groups are young and unexperienced workers. Employers should be advised to have appropriate interventions on everyday job routine to prevent boredom especially on long trips.

1427 DISTRESS AND PSYCHOSOCIAL RISK FACTORS IN CHILEAN COPPER MINERS: A CROSS SECTIONAL STUDY

^{1,2}Méndez José*, ³Carvalho Denise, ³Radon Katja, ⁴Silva Helia. ¹Codelco Chile, División Andina, Los Andes, Chile; ²Sociedad Chilena de Medicina del Trabajo, Santiago, Chile; ³Center for International Health, Ludwig-Maximilians-Universität München, Munich, Germany; ⁴Escuela de Salud Pública, Universidad de Chile, Santiago, Chile

10.1136/oemed-2018-ICOHabstracts.1744

Introduction Mental illnesses are common among general population. They are responsible for decreased quality of life, work absenteeism, premature deaths and increasing costs for health systems. Mental diseases can be caused or aggravated by occupational factors and might increase the risk of accidents in the mining industry, if they are not properly detected and treated. The aim of this study was to estimate the association between distress and psychosocial risk at work in a mining company in Valparaíso region, Chile.

Methods A cross-sectional study was conducted during 2014–2015 in Andina Division, located in Los Andes, Chile. 343 mining workers were invited to participate (response rate 99.7%), classified according to work-tasks into operative (n=253) and administrative workers (n=79). The adapted survey of Working Conditions and Health in Latin America, GHQ-12 (Goldberg's health questionnaire) of mental symptoms and ISTAS-21 questionnaire of psychosocial risk were applied. The main outcome was distress (GHQ-12 ≥ 5). Descriptive, bivariate (χ^2 test) and logistic regression (multivariate) analyses controlling for potential confounding factors were performed.

Results Prevalence of distress was 23.6%. Sensitivity analysis (GHQ-12 ≥ 7) showed a prevalence of potential mental illness of 8.6%. No differences were observed between workers from main company and subcontractors or between operative and administrative workers. Not being able to concentrate (43%), feeling under stress (43%) and losing much sleep (35%) were the most frequently reported. In bivariate analysis, a statistically significant association was found between the presence of distress and high strain jobs (27.5%; $p=0.02$). No statistically significant association was found between low job security or type of job and distress. In logistic regression analysis, workers in high strain jobs (OR:2.02; 95% CI: 1.10 to 3.71) were at increased odds of distress, compared to low strain jobs.

Discussion High strain jobs might be related to distress in Chilean miners. The causes declared for distress could increase the risk of accidents in mining industry.

1104

CONTRIBUTION OF JOB SATISFACTION AND OVERTIME WORK TO MENTAL HEALTH: 1-YEAR FOLLOW-UP STUDY

¹Masanori Ohta*, ²Yoshiyuki Higuchi, ³Hisamichi Sugimura, ⁴Masaharu Kumashiro.
¹International College of Arts and Sciences, Fukuoka Women's University, Fukuoka, Japan;
²Faculty of Education, Fukuoka University of Education, Munakata, Japan; ³Kohoku Family Clinic, Tokyo, Japan; ⁴The Association for Preventive Medicine of Japan, Tokyo, Japan

10.1136/oemed-2018-ICOHabstracts.1745

Introduction Overtime work has been suspected as a risk factor for workers' mental distress. A recent cross-sectional study showed that job satisfaction and overtime work could modify the association with mental health in a direct and combined manner (Nakata, 2017). Thus, we have examined the association between job satisfaction and overtime work with mental health using a longitudinal study to explore of causal relationships.

Methods Participants were 1,558 Japanese IT (information technology) workers. Each completed the General Health Questionnaire (GHQ, 28-item version) and Brief Job Stress Questionnaire (BJSQ, index for job strain and job supports)

and indicated job satisfaction in 2011 and 2012. Actual amount of overtime work during 3 months in 2011 was recorded by the company. A total of 1408 respondents completed questionnaires and 758 participants were excluded from this analysis because of high GHQ scores (GHQ >5 , indicating mental distress) in 2011. Finally, 650 participants were used for the evaluation. Risk of mental distress in 2012 by overtime work, job satisfaction, and both combined was estimated by univariable and multivariable logistic regression analysis.

Result Compared to participants with high job satisfaction, those with low satisfaction had increased risk of mental distress in the following year (crude odds ratio (cOR): 1.75), but this difference became insignificant after adjusting for potential confounding factors such as job strain and job supports. Furthermore, there was no significant difference in the risk of mental distress for participants with or without overtime work. However, in the combined analysis, compared to participants with overtime work and high job satisfaction, those with overtime work and low job satisfaction had an increased risk of high GHQ scores (adjusted OR: 2.04).

Conclusion Present longitudinal data suggests that the combination of low job satisfaction and overtime work induces an increased risk of mental distress.

160

PSYCHOSOCIAL RISKS AND MENTAL HEALTH STATUS IN MANUFACTURING SECTOR WORKERS IN VENEZUELA

¹Rodríguez Ilse, ²Rojas Maritza*, ²Guevara Harold. ¹Gente Consultores C.A. Maracay, Venezuela; ²Health Sciences Faculty, University of Carabobo, Valencia, Venezuela

10.1136/oemed-2018-ICOHabstracts.1746

Introduction Occupational Psychosocial Risk Factors (OPRF) studies are a priority because may trigger physical/mental health-effects. National studies confirm international investigations where exposure to unhealthy conditions can constitute a problem. National work regulations emphasise that jobs should achieve psychological well-being. This study identified OPRF in four 'Manufacturing' companies in Venezuela, measuring exposure magnitude associating them with self-perceived mental health.

Methods Observational-descriptive, field study. Psychosocial Risk Assessment was used and CoPSOQ-ISTAS 21, PAST 2.7 c for analysis. Questionnaire evaluates six Dimensions and 20 Factors. Results express exposure's prevalence as the workers proportion in each situation: unfavourable (high risk), intermediate and favourable (low risk).

Results Sample 576 workers. In all DIMENSIONS no high risk was greater than 37%. Social Capital/Compensations had the highest unfavourable situation (36.78% and 35.91%, respectively). Employment insecurity (favourable 57.93%), Working conditions (favourable 57.87%), Recognition (unfavourable 45.48%). Emotional demands reported greater risk (41.09%). Leadership Quality 50.09% and Predictability 53.34%. 60% of variables had significant correlation with anxiety/depression.

Discussion and conclusion Psychosocial risks were identified with low magnitudes dimensionally but there were 6 factors in high risk. Siegrist 1996 showed that unbalance Effort/