all of which were related to the intense physical and mental load that his labour duties required. In June 2012, while driving to his job, he made a call to his wife where he tells her where he feared that he was being followed, the call was interrupted, he is helped by public security officers which found him on his car with alterations alertness, he is taken to the hospital, where is diagnosed with a hypertensive crisis, presenting haemorrhagic cerebrovascular disease, and entering into cardiac arrest causing death.

Conclusion According to the psychosocial risk factors, and the violence in the working environment, as multiple tasks are done, for example, prolonged shifts, chronic work-related stress, and the threats against his integrity and his family; the case is qualified as a death caused by Karoshi's syndrome.

1224 STRESS AND MENTAL HEALTH DUE TO WORKPLACE CONFLICTS IN KOREAN WORKERS

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Introduction The purpose of this study is to analyse and analyse the current status and causes of conflicts in the personal and workplace, and analyse the factors affecting the mental health of workers such as suicide and addiction.

Method The study subjects were 753 workers in the workplace who agreed to the purpose of the survey and hoped to participate. After describing the purpose and method of the investigation to the safety and health manager who visited the Safety and Health Education Centre, each worker was asked for his/her consent to the desired workplace and conducted the Self-filling questionnaires. For family conflicts, a tool developed by the Korea Institute for Health and Social Affairs was used and, for the level of conflict related to job, the Korean Job Stress Measurement Tool (KOSS) was used. Social and emotional health was measured using 28 GHQ items, and depression was measured using 11 CES-D items. Work stress was analysed using SPSS WIN 20.0.

Results A survey of 753 workers showed that 80.9% of workers experienced at least one conflict and stress in the workplace during the three months preceding the survey. The average number of conflicts and stressors experienced by workers in the workplace was about 8.7 out of 26, and the most common conflict and stress factors experienced by workers are those who need to perform various tasks at the same time, and 58.7% of workers have experienced it. The psychological burden of workers' family conflicts was found to have a greater psychological burden on women than men. Conflict and stress factors experienced by workers in the workplace were found to have a causal relationship that affected or affected the depressive symptoms and mental health of the workers. Job stress perceptions and experiences due to conflicts in the workplace were found to be lower in men than in women. Most workers are not systematically managing conflicts in the family and the workplace, and they are more likely to resolve themselves.

Conclusion According to a survey of 753 workers, in the previous three months, 80.9% of the workers experienced at least one conflict and stress in the workplace so that it is considered that the experience of stress due to conflict in the workplace of Korean workers is serious. The conflict and

stress factors experienced by the Korean workers in the workplace seem to be related to the depressive symptoms and the mental health of the workers. Also, as mentioned above, the Korean people are not systematically managing conflicts in the family and the workplace, and they are characterised by strong tendency to resolve themselves. In order to cope with this situation, it is necessary to develop a variety of services and programs that meet the needs of consumers in the public sector and build up a regional service delivery system that can reach the public more aggressively. And it is necessary to develop and provide a mental health care program based on risk assessment that safety and health managers and small business employers can use in the field in relation to workplace stress management.

1313 JOB DEMAND CONTROL AND HYPERTENSION A CROSS-SECTIONAL STUDY IN COLOMBIAN TYPIST

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Introduction Hypertension has become a public health a worldwide challenge. It has been associated with psychosocial working conditions and with several chronic diseases. One of the job positions where poor psychosocial working condition might be present is a typist. We aimed to determine the prevalence of hypertension in Colombian typist population, associated with psychosocial factors at the work and identifying associated socio-demographic characteristics and employment conditions.

Methods Cross sectional interview-based questionnaire study and measurements (blood pressure, high, weigh) in 196 typist and 134 administrative workers from the same company in Colombia (response 100%). Logistic regression models adjust to type of work, job demand control, Effort-Reward-Ratio, social support, age, gender and overweight.

Results The prevalence of hypertension in workers was 17.82%. The age of workers was from 20 to 39 years (76.3%). From the participants with high blood pressure, 31.2% had overweight, 21% reported high tension and 20% indicated active job (p 0.36). The most important associations in the logistic regression, was overweight (OR 4.6; 95% CI: 2.1 to 9.9), age between 30 and 40 years (OR 2.75; 95% CI: 1.1 to 6.5), high social support (OR 2.45; 95% CI: 1.1 to 5.1) and active job (OR 3.36; 95% CI: 1.1 to 10.2).

Conclusions This study results indicate an increment of the prevalence of hypertension in Colombian young people, related to the epidemiological transition. It is an evidence of the need to shift the orientation of the country health programs to chronic diseases, such as the hypertension and overweight.

982 IMPROVING MANAGEMENT SKILLS IN ADDRESSING EMPLOYEE STRESS

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Introduction Stress related symptoms are common in staff of large tertiary hospitals. However, the quality of support received from management varies widely. As a Specialist Registrar in the Occupational Health Department of such a hospital, I sought to improve the competency of line managers across four key areas of stress management by providing an educational intervention.

Methods Using a standardised self-assessment rating scale, a learning and development need was identified among line managers. This information was used in order to prepare a workshop, using a standardised approach, aimed at improving their understanding of stress, how to recognise stress in the workplace and how to manage an employee experiencing stress. After delivering the workshop, participants subsequently repeated the self-assessment rating scale, and the change in competency was measured.

Results A statistically significant improvement was seen across all four competency levels measured, with p-values for each measuring less than 0.05. The mean scores from all participants in their post-intervention self-assessments were in excess of the 90% threshold for effectiveness in each area.

Discussion Feedback following the workshop was positive and a clear improvement in managers' competency was achieved. This was further supported by examining referrals to the department from workshop participants both before and after the intervention, with an improvement in the quality of information supplied noted.

Although the number of participants was small, with seven participants fully completing all evaluations, each participant is responsible for an average of twenty employees'. Therefore the intervention has the potential to positively affect up to 150 employees, with a consequent reduction in absenteeism, and healthcare costs attributable to stress, likely. In order to accurately quantify this, long-term absenteeism rates should be measured.

The findings of this project demonstrate a clear benefit in engaging managers in educational workshops to improve their competency in dealing with employees who are experiencing work-related stress.

1308 FACING COMPLAINING CUSTOMER AND SUPPRESSED EMOTION AT WORKSITE RELATED TO SLEEP DISTURBANCE IN KOREA

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Introduction In recent years, there has been increasing interest in emotional labour because of the shift of the economy from the manufacturing to the service sector. This work involves a great deal of so-called 'emotional labour'. Sleep disturbance represents an enormous impact on the wellbeing of individuals and society as a whole. This study aimed to investigate the effect of facing complaining customer and suppressed emotion at worksite on sleep disturbance among working population.

Methods We assumed that (1) engaging complaining customers and (2) suppressing emotions at a worksite would be crucial factors in potential excessive emotional demand in service workers. This study set out to assess the association between

sleep disturbance and emotional demands, including the influence of 1) and 2) above in a population-based study from a nationally representative sample of Korean workers, the Korean Working Condition Survey (KWCS) which has comprehensive questionnaires regarding the occupational information for almost fifty thousand workers in Korea. Statistical analysis was performed using the SAS 9.2 software (SAS Institute Inc., Cary, NC, USA.).

Results Among workers in working environments where they always engage complaining customers had a significantly higher risk for sleep disturbance than rarely group (The OR [95% CI]; 5.46 [3.43–8.68] in male, 5.59 [3.30–9.46] in female workers). The OR (95% CI) for sleep disturbance was 1.78 (1.16–2.73) and 1.63 (1.02–2.63), for the male and female groups always suppressing their emotions at the workplace compared with those rarely group. Compared to those who both rarely engaged complaining customers and rarely suppressed their emotions at work, the OR (CI) for sleep disturbance was 9.66 (4.34–20.80) and 10.17 (4.46–22.07), for men and women always exposed to both factors.

Conclusion The level of emotional demand, including engaging complaining customers and suppressing emotions at the workplace is significantly associated with sleep disturbance among Korean working population.

1510 PRECARIOUS EMPLOYMENT CONDITIONS AND ITS ASSOCIATION WITH HEART RATE VARIABILITY IN MEXICAN HOSPITAL WORKERS

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Introduction Psychosocial working conditions such as employment precariousness or an imbalance between effort and reward at the workplace might result in cardiovascular diseases. One marker of cardiovascular effects is Heart Rate Variability (HRV). The objective of this study was to analyse the relation between precarious employment and HRV in health and administrative workers employed at a hospital in Mexico City.

Methods In this cross-sectional study, 206 hospital employees without known cardiovascular diseases participated (response 90%). An interview-based questionnaire assessed sociodemographics, employment conditions, employment precariousness (EPRES) and lifestyle factors. HRV was measured over 10 min in sitting posture. Standard Deviation (SDNN) of the RR intervals over a five minutes was calculated (IBM SPSS 24).

Results Healthcare personnel (n=106) was less likely to be active smokers (9% vs 29%) than administrative workers. Healthcare workers reported lower employment duration (24% vs 7% duration <5 years), working more hours per week (19% vs 7% working ≥60 hours/week), and more shift work (22% vs 11%) than the comparison group. They were more affected by temporality of the contract (27% vs 7%) and were less likely to suffer from economic deprivation (46% vs 69%; all $p_{\text{Chi}^2} < 0.05$) than office workers. Mean SDNN did not differ between healthcare workers (49,93±SD 31,91) and administrative workers (54,26±41,50; $p_{\text{t-Test}}=0,33$). This was confirmed after adjusting for potential confounders. The only significant work-related predictor of