

P-82

### SUICIDE IDEATION IN ASSOCIATION WITH MULTIPLE EXPOSURES TO PSYCHOSOCIAL WORK FACTORS IN THE FRENCH NATIONAL WORKING CONDITIONS SURVEY

<sup>1</sup>Isabelle Niedhammer, Marilyne Bègue, Jean-François Chastang, Sandrine Bertrais. <sup>1</sup>Inserm DR GRAND OUEST, France

10.1136/OEM-2021-EPI.190

**Objective** The objective of this study was to explore suicide ideation in association with multiple occupational exposures, especially those related to the psychosocial work environment, in the French working population.

**Methods** The study relied on the data of the 2016 national working conditions survey, including a sample of the French working population of 20,430 employees, 8,579 men and 11,851 women. The outcome was suicide ideation within the 12 last months. All types of occupational exposures were explored including psychosocial work factors, working time/hours and physico-chemical exposures. The exposures-outcome associations were examined by weighted logistic regression models with adjustment for covariates. Sensitivity analyses were performed to check the robustness of the results.

**Results** The prevalence of suicide ideation was of similar magnitude among men and women (5.2% and 5.7% respectively). A large number of psychosocial work factors were associated with suicide ideation: quantitative and cognitive demands, low influence and possibilities for development, low meaning at work, low sense of community, role conflict, job insecurity, temporary employment, changes at work, and internal violence. The risk of suicide ideation increased with the number of psychosocial work exposures linearly. There were some differences in the exposure-outcome associations between genders. No association was observed for working time/hours and physico-chemical exposures with suicide ideation. Sensitivity analyses provided similar results.

**Conclusion** Psychosocial work exposures were associated with suicide ideation, and displayed cumulative effects on this outcome. Our study is one the first to study multiple occupational exposures in association with suicide ideation. More research and prevention are needed on psychosocial work exposures and their cumulative effects on suicide ideation.

P-83

### OCCUPATIONAL RISK FACTORS FOR DEPRESSION IN THE NATIONAL FRENCH WORKING POPULATION

<sup>1</sup>Isabelle Niedhammer, Kylian Coindre, Sarah Memmi, Sandrine Bertrais, Jean-François Chastang. <sup>1</sup>Inserm DR GRAND OUEST, France

10.1136/OEM-2021-EPI.191

**Objective** Studies exploring occupational exposures comprehensively in association with depression measured using diagnostic instrument are lacking. The present study aimed to examine the associations of occupational exposures with depression in the national French working population.

**Methods** We used the data from the 2016 SUMER survey including a national representative sample of 25,977 employees, 14,682 men and 11,295 women. The outcome was depression measured using the validated PHQ-9 instrument and algorithm. All types of occupational exposures were studied: psychosocial work factors, working time and hours, and physico-chemical exposures. The exposures-outcome

associations were examined using weighted logistic regression analyses for each gender separately. The following covariates were taken into account: age, marital status, occupation, and economic activity of the company.

**Results** The prevalence of depression was 5.70% for women and 3.78% for men, with a significant difference between genders. Low levels of decision latitude and reward, bullying, work-family conflict and ethical conflict for men and women, and high levels of psychological demands, low levels of social support, and long working hours for women were found to be associated with depression. There was no association between physico-chemical exposures and depression.

**Conclusion** Our study showed that the main occupational risk factors for depression were psychosocial work exposures. The study had two major strengths: the assessment of the work environment comprehensively and the measurement of depression using a diagnostic instrument and algorithm. Prevention oriented towards the psychosocial work environment may be useful to prevent depression at the workplace.

P-84

### THE FRACTIONS OF CARDIOVASCULAR DISEASES AND DEPRESSION ATTRIBUTABLE TO PSYCHOSOCIAL WORK EXPOSURES IN EUROPE

<sup>1</sup>Isabelle Niedhammer, Hélène Sultan-Taieb, Agnès Parent-Thirion, Jean-François Chastang. <sup>1</sup>Inserm DR GRAND OUEST, France

10.1136/OEM-2021-EPI.192

**Objective** This study aimed to assess the fractions of cardiovascular diseases and depression attributable to five psychosocial work exposures in Europe (35 countries), for all countries together and each country separately.

**Methods** We used the data of the sample of 35,571 employees from the 2015 European Working Conditions Survey to assess the prevalence of exposure to job strain, effort-reward imbalance, job insecurity, long working hours, and workplace bullying. The relative risks were extracted from published literature reviews and/or meta-analyses. The outcomes included: coronary/ischemic heart diseases (CHD), stroke, atrial fibrillation, peripheral artery disease, venous thromboembolism, and depression. We calculated individual attributable fractions (AF) for each exposure and overall AFs for all studied exposures together.

**Results** The highest significant AF was found for job strain and depression (17%). The other AFs for depression were also significant: job insecurity (9%), bullying (7%), and effort-reward imbalance (6%). Almost all AFs for cardiovascular diseases were significant but lower than 5% (one exception was the fraction of peripheral artery disease attributable to job strain, 11%). There were differences in the AFs for depression between countries. Differences in the AFs were also observed between countries and between genders for long working hours. The overall AFs related to the five studied exposures together were found to be 17%-35% for depression and 5%-11% for CHD.

**Conclusion** The fractions attributable to psychosocial work exposures were substantial, especially for depression. Preventive measures oriented towards the psychosocial work environment may contribute to reduce the burden of diseases attributable to these exposures.