

social role of masculinity may explain the high effect magnitude in men. Given that women are more frequent targets of sexual harassment, a sexist social and organisational context may mask the effect of this unacceptable violence in women. Also, there might be a possible normalization of the practice with necessary adaptation of women.

O-486

GENDER-BASED VIOLENCE AND HARASSMENT AND THE INCIDENT PURCHASE OF PSYCHOTROPIC MEDICATION. A PROSPECTIVE COHORT STUDY ON THE SWEDISH WORKING POPULATION

¹Katrina Blindow, Johan Paulin, Kristina Johnell, Anna Nyberg. ¹Karolinska Institutet, Sweden

10.1136/OEM-2021-EPI.138

Introduction Gender-based violence and harassment (GBVH) in the workplace has been found to be associated with self-reported mental ill-health. The prospective risk of using psychotropic medication for the treatment of common mental disorders (CMD) is unclear, though.

Objectives To estimate the prospective association between the exposure to three types of GBVH and the purchase of psychotropic medication in a large population-based Swedish study.

Methods Survey data from the biannual Swedish Work Environment Survey (SWES) from 2007 to 2013 (N=23 452) were merged with data on antidepressants, sedatives/hypnotics and anxiolytics from the Swedish Prescribed Drug Register. Exposure to GBVH was measured as sexual harassment 1) from workplace personnel, 2) from non-workplace personnel (e.g., customers or clients), and 3) gender harassment from workplace personnel. Gender-stratified cox proportional hazards analyses with days to outcome as the time-scale and first instance of medicine outcome as the failure event were fitted for each exposure. Analyses were adjusted for age, parental migration background, education, income, family situation, and labor market industry.

Results In men, weekly to daily exposure to gender harassment (HR 2.39, 95% CI 1.35 - 4.23) and in women, gender harassment once in 12 months (HR 1.18, 95% CI 1.02 - 1.36) and weekly to daily (HR 1.62, 95% CI 1.13 - 2.31) were associated with prospective medication outcome. In women, exposure to sexual harassment monthly from workplace personnel (HR 1.60, 95% CI 1.03 - 2.49) and from non-workplace personnel (HR 1.34, 95% CI 1.00 - 1.79) were also associated with medication purchase.

Conclusion Exposure to gender harassment at the workplace may contribute to the development of CMD, particularly when it occurs more frequently. Sexual harassment seems to impact the mental health of women, regardless if it stems from individuals inside or outside the organization.

Shiftwork

O-47

BEYOND NIGHT WORK: WHY SHIFT WORK WITHOUT NIGHT WORK MAY STILL BE HARMFUL

¹Jacqueline Ferguson, Aki Koskinen, Mikko Härmä. ¹Stanford University, United States

10.1136/OEM-2021-EPI.139

Objective Most literature examining the health effects of shift work prioritize night work as the exposure of interest. However, little attention has been paid to the co-occurrence of working time characteristics beyond shift type (e.g. night vs day) that may lead to circadian rhythm disruption; characteristics such as shift intensity, shift duration, rotation pattern, and weekend work. We hypothesize that the co-occurrence of these characteristics with and without night work could explain why shift work without night work is sometimes associated with adverse health effects.

Methods Time-registry data on 14,430 full-time (>150 shifts/year) healthcare workers from 2012–2016 were sourced from the Working Hours in the Finnish Public Sector (WHFPS) study to describe the prevalence and co-occurrence of working time characteristics that may lead to circadian rhythm disruption. First, each characteristic (type, intensity, duration, rotational pattern, and weekend work) was cross-classified in a matrix to examine its co-occurrence with all other characteristics (e.g. how many night shifts were also long shifts). Second, the prevalence of each working hour characteristic by annual shift schedules (permanent or rotating day/evening/night) were examined.

Results Our results provide evidence that working hour characteristics hypothesized to cause circadian rhythm disruption have a varying distribution with each other and across shift schedules- even schedules that don't include nights. While day shifts are thought to not cause circadian rhythm disruption, 32% of day shifts versus 34% of night shifts co-occurred with long work hours, quick returns, and rotations. Furthermore, despite not including nights, the Day/Evening schedule had more quick returns than the Day/Evening/Night schedule and still contained rotations, long hours, and weekend work.

Conclusion Thus, a cautious interpretation of the association between night work and human health may be warranted, as circadian rhythm disruption may be caused by long hours, rotations, or quick returns which may or may not accompany night work.

O-148

SHIFT WORK AND BREAST CANCER. A COHORT STUDY FROM FINLAND BASED ON SURVEY AND PAYROLL DATA

¹Mikko Härmä, Anneli Ojajärvi, Aki Koskinen, Jenny-Anne Lie, Mika Kivimäki, Johnni Hansen. ¹Finnish Institute of Occupational Health, Finland

10.1136/OEM-2021-EPI.140

Introduction International Agency for Research on Cancer (IARC) has concluded that night shift work is probably carcinogenic to humans.

Objectives To examine the association of shift work with breast cancer among women in the Finnish public sector.

Methods We investigated the associations of night and shift work, and potential confounders, with incident breast cancer using a survey (N=64 082, mean age 42,3 years) and payroll cohort (N=17 286, 2008-) of the Finnish Public Sector study (FPS). Survey and payroll employees (baseline 2000–2012) were linked to National Cancer Register and followed-up for breast cancer to the end of 2016. Hazard ratios (HR) and confidence intervals (95% CI) from Cox proportional hazard regression models were calculated, including adjustment for