stratification to examine the sex-specific associations between blue-collar status and hypertension, after adjusting for SES and other risk factors.

Results: We found that education, age, marital status, and parity were the strongest predictors of employment status among women. Married women were less likely to hold blue-collar jobs, while women with children were more likely to do so (Adj OR for hourly status = 0.62 (0.45 – 0.87) and 2.12 (1.15 – 3.91), respectively). Among men, education, age, race/ ethnicity, marital status, and parity were significant predictors, with married men and those with children being less likely to hold blue-collar jobs (e.g., more likely to be white-collar) (Adj OR = 0.72 (0.59 – 0.87) and 0.78 (0.67 – 0.90)). After propensity restriction and multivariate adjustment, the effect of hourly status on hypertension risk was significant only among women (Adj OR = 1.99 (1.33 – 2.97) for women vs. 1.05 (0.94 – 1.17) for men).

Discussion and conclusions: We found that partnership conferred increased likelihood of salaried status, while parity had opposite effects on work status for men and women. After adjusting for socioeconomic predictors, hourly (blue-collar) work status confers greater risk to women.

Tu-P-49 <mark>ATYPICAL WORK HOURS, SLEEP DURATION, AND THE METABOLIC SYNDROME: A STUDY OF POLICE OFFICERS.</mark>

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Background and aims: Working atypical hours has been shown to have adverse effects on health outcomes. The objective of this study was to examine whether working such hours is associated with metabolic syndrome among police officers and whether this association is influenced by sleep duration.

Methods: A sample of 115 Buffalo, NY police officers was randomly selected. Shift work and overtime data were obtained from daily payroll records. Officers were categorized as working a day, afternoon or midnight shift based on the highest percent of hours worked on each of these shifts from 1994-2000. Sleep duration was measured as the average hours of sleep each day for the past seven days. Dichotomous variables were created using median sleep duration (< 6 vs. ≥ 6 hours/day) and overtime (< 1.7 vs. ≥ 1.7 hours/week). Metabolic syndrome was defined using five components based on standard criteria: abdominal obesity, elevated blood pressure, reduced HDL cholesterol, elevated triglycerides, and elevated fasting glucose levels. 98 officers had complete data. Unadjusted and adjusted mean number of metabolic syndrome components and p-values for differences across three levels of shift work were determined using ANOVA and ANCOVA models. Multivariable models included adjustment for age, gender, education, marital status, smoking, drinking, physical activity and police rank.

Results: Officers working midnight shifts tended to have a slightly higher mean number of metabolic syndrome components compared to those who worked day or afternoon shifts (gender-adjusted mean = 1.51 vs. 1.15 and 1.12, respectively). Adjustment for gender and age (mean = 1.62 vs. 1.04 and 1.20) and multivariable adjustment (mean = 1.48 vs. 0.79 and 1.00) had minimal impact on the results. Stratification on sleep duration and overtime revealed statistically significant associations between midnight shifts and the mean number of metabolic syndrome components for both unadjusted and covariate-adjusted models among officers who had less sleep (p = 0.013) and worked more overtime (p = 0.007).

Discussion and conclusions: Results suggest that shorter sleep duration and more overtime combined with night shift work may be important contributors to the metabolic syndrome. These factors may provide useful targets for prevention.

Tu-P-50 AGE DIFFERENCES IN THE ADJUSTMENT OF CARDIOVASCULAR SYSTEM AMONG CONTROL ROOM SHIFTWORKERS

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Background and aims: Shiftwork including night shifts, long working hours as well as mental work are known as the risk factors for cardiovascular disease. Ageing is considered as the high risk factor in this respect. The objective was to reveal the age differences in the adjustment of cardiovascular system (CVS) to work among control room shiftworkers.

Methods: Heart rate (HR), systolic and diastolic blood pressures (BP) were registered in electricity distribution network controllers aged 31-63 each 2 hours during 12-hour working shifts over a 3 week periods under 2-day shift rotation (n=17 persons, N=1224 subject-observations). Group data analysis was performed for workers aged up to 40 years old and beyond 40 at the p-value of 0.05.

Results: The higher BP in the first and last hours of a working shift, HR – in the first hours compared to other periods of a working shift were found (Tukey's HSD test, p<.05) reflecting the increase in CVS activity while receiving and transmitting a shift. These changes were more pronounced in the older workers. Mainly normal type of bloodcirculation selfregulation was revealed in young workers during working shifts for the exception of some period of the 2nd consecutive day shift. Mainly unfavourable