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## SLEEP, SLEEPINESS, SHIFTWORK, AND OCCUPATION

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Shift workers sleep less than those who do not have shift work or watches (1, 2). However, it is not clear to what extent type of occupation is important. We studied relations between sleep, sleepiness, insufficient sleep and other sleep characteristics, occupation, shiftwork, and subjective health in a population of 40-45 year olds in Hordaland, Norway. The study included all individuals in the county born 1953-57 (29.400). Participation rate was 63% (70% women and 57% men). Participants answered questions on occupation, on whether they had shift work or watches, and on subjective health. A randomly selected half of the subjects, 8860 persons (5329 women and 3531 men), answered a questionnaire with detailed information on sleep habits and problems. Occupational groups classified were: Leaders, serviceworkers in non-personal services, service workers in personal services, farmers and fishery workers, craft workers, plant operators, and drivers.

Preliminary results suggest clear differences in night sleep duration between occupational groups. Craft workers, plant operators and drivers slept less than non-personal service workers. Within some occupations (leaders, personal service workers, and plant operators), shiftworkers slept less than those who did not have shift work or watches,

Risk factors for sleep characteristics (sleepiness, insufficient sleep, falling asleep at work, sleep quality and insomnia) for the different occupational groups were investigated using logistic regression analyses and using leaders as the reference, controlling for gender, marriage status, subjective health, education, income and shiftwork. For sleepiness, increased risk compared to leaders (significant odds ratios of at least 1.5) was found for farmers/fishery workers, craftworkers and plant operators. Plant operators and drivers had increased risk for insufficient sleep and falling asleep at work compared to leaders. Shift work increased the risk for falling asleep at work, while being female halved that risk.

Conclusion: Occupation seems to have separate effects on sleep duration and sleep characteristics in addition to the effect of shiftwork.

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2. Ursin R, Bjorvatn B, Holsten F. Sleep duration, subjective sleep need, and sleep habits of 40- to 45-year-olds in the Hordaland Health Study. *Sleep* 2005; 28: 1260-1269.