



## Occupational noise and hypertension – a cross-sectional study on Swedish women

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### ABSTRACT

The detrimental effects of occupational noise exposure on hypertension have been previously demonstrated, with the majority of studies performed on men. Female-dominated workplaces, such as preschool and healthcare, implicates a sound environment that demand the workers' attention. This is different from industrial work where the sound input should often be disregarded or attenuated by hearing protection. In addition, socio-economic factors such as education might modify the risk differently for men and women. Our study aims to investigate the effect of self-reported occupational noise exposure on the prevalence of self-reported physician diagnosed hypertension in women and to assess whether this effect is influenced by participants' educational level, controlling for sociodemographic and life style factors. Data was collected by self-assessment questionnaires and logistic regression was used for analysis. Occupational noise exposure is associated with increased hypertension prevalence in women (OR 1.19; 95% CI 1.03-1.38) especially among higher educated women (OR 1.27; 95% CI 1.06-1.52). Findings contribute to understand how occupational noise might affect health and suggest that preventive measures should take into account socio-economic factors, work demands and gender perspective.