

Study Ties Hypertension in Male Workers to Low Job Control



Work conditions can impact worker health in many ways, some surprising. For example, a recent study found that low job control is associated with an increased risk of hypertension (high blood pressure) among men, but not women.

Hypertension is a risk factor for strokes and heart attacks, among other health ailments. In Ontario, the incidence of hypertension increased by 60% over the 10-year period 1995 to 2005.

The study was conducted by researchers at the Institute for Work & Health (IWH) and the Institute for Clinical Evaluative Sciences (ICES) and published in the Jan./Feb. 2013 issue of the *Canadian Journal of Public Health* (vol. 104, no. 1).

Job control is the ability to make decisions about the way work is done or skills are used to meet the demands of the job. The study found that, among men reporting low job control, 27% were diagnosed with hypertension during a nine-year period compared to 18% among men reporting high job control.

The researchers followed 6,611 actively employed (but not self-employed) 35- to 60-year olds in Ontario who hadn't been previously diagnosed with hypertension.

Key findings:

- 12% of the overall study group developed hypertension, with a higher incidence among men (21%) than women (18%).
- After accounting for a range of personal and work factors that could affect the incidence of hypertension, men with the lowest levels of job control still had a significantly increased risk of developing hypertension than men with the highest levels of job control—27% versus 18%, which represents an 85% increase in risk among men with low job control. There was no such difference in women.
- The proportion of cases of hypertension among men that could be attributed to low job control was 12%, which is higher than the proportion of cases that could be attributed to poor health behaviours such as smoking, drinking, not getting enough exercise and not eating enough fruits and

vegetables. In fact, low job control was second only to obesity, to which 26% of cases of hypertension among men could be attributed.

- In addition, no relationship between high job strain (i.e. high psychological demands and low job control) and hypertension was found among either men or women.

What does this survey mean? 'Primary prevention programs to reduce hypertension are largely aimed at changing unhealthy behaviours,' says IWH Scientist Dr. Peter Smith, who led the research. 'But this study suggests that prevention strategies might also assess the potential for modifying work environments as a hypertension control intervention.'

A previous study from the same group of IWH and ICES researchers, using the same nine-year study data, found low job control is associated with an increased risk of diabetes among women, but not men.