Comparing the Risk Associated With Psychosocial Work Conditions and Health Behaviours on Incident Hypertension Over a Nine-year Period in Ontario, Canada

Peter M. Smith, PhD, MPH,¹⁻³ Cameron A. Mustard, ScD,^{1,2} Hong Lu, PhD,⁴ Richard H. Glazier, MD, MPH^{2,4-6}

ABSTRACT

OBJECTIVES: Hypertension is an increasingly important health concern in Canada. This paper examines the risks associated with psychosocial working conditions compared to health behaviours on the risk of hypertension over a 9-year period in Ontario, Canada.

METHODS: We used data from Ontario respondents to the 2000-01 Canadian Community Health Survey linked to the Ontario Health Information Plan database covering physician services and the Canadian Institute for Health Information database for hospital admissions. We focused on labour market participants aged 35 to 60, who had not been previously diagnosed with hypertension, were not self-employed, and were working more than 10 hours per week, more than 20 weeks in the previous 12 months (N = 6,611). Subjects were followed for a nine-year period to ascertain incidence of hypertension.

RESULTS: Low job control was associated with an increased risk of hypertension among men, but not among women. The population attributable fraction associated with low job control among males was 11.8% in our fully adjusted model. There was no consistent pattern of increased risk of hypertension across different levels of health behaviours.

CONCLUSION: Primary prevention efforts to reduce the incidence of hypertension predominantly target modifiable health behaviours. Evidence from this longitudinal cohort suggests that modifiable characteristics of the work environment should also be considered in the design of cardiovascular disease prevention programs, in particular for male labour market participants.

KEY WORDS: Hypertension; psychosocial factors; work; gender

La traduction du résumé se trouve à la fin de l'article.

Can J Public Health 2013;104(1):e82-e86.

The prevention and management of hypertension is a long-standing public health concern in developed countries. In Ontario, Canada's largest province, rates of hypertension increased from 153.1 to 244.8 per 1000 Ontarians between 1995 and 2005; a relative increase of 60%.¹ This increased hypertension prevalence is thought to be attributed to increasing rates of obesity and sedentary lifestyles, as well as improved survival among the affected population.^{1,2} From a public health perspective, it is important to understand the relative impact of various modifiable risk factors on hypertension incidence. While many public health efforts have focused on changes to health behaviours, relatively little research has focused on the relative contribution of the psychosocial work environment to hypertension risk³ – this despite evidence that aspects of the psychosocial work environment are associated with elevated hypertension risk,⁴⁻⁶ and that aspects of the work environment can be modified.^{7,8}

In particular, there have been relatively few Canadian studies examining the relationship between the psychosocial work environment and hypertension.^{9,10} The most recent Canadian study we are aware of examined the relationship between cumulative exposure to job strain (where job control is low and psychological demands are high) and measured blood pressure over a 7.5-year period among employees of public organizations in Quebec City.¹¹ In this study, exposure to job strain at time two, and exposure at both time one and time two, were associated with elevated systolic blood pressure readings among men, but not women, compared to

respondents with no exposure to job strain at either time point. We are not aware of any Canadian studies that have examined the temporal relationship between the psychosocial work environment and subsequent risk of incident hypertension, among a population free of hypertension when work stress was assessed.

The objectives of this paper are to address this research gap by examining the relationships between the psychosocial work environment and subsequent hypertension over a 9-year period in Ontario, Canada; and to compare the risks associated with the psycho-

Author Affiliations

1. Institute for Work & Health, Toronto, ON
2. Dalla Lana School of Public Health, University of Toronto, Toronto, ON
3. School of Public Health and Preventive Medicine, Monash University, Victoria, Australia
4. Institute for Clinical Evaluative Sciences, Toronto, ON
5. Centre for Research on Inner City Health, St. Michael's Hospital, Toronto, ON
6. Department of Family and Community Medicine, St. Michael's Hospital and University of Toronto, Toronto, ON

Correspondence: Peter Smith, Associate Professor, School of Public Health and Preventive Medicine, Monash University, Victoria, Australia, Tel: +613.9903.0283, E-mail: peter.smith@monash.edu

Sources of Support: This work was supported by a grant from the Canadian Institutes of Health Research (#201246). Peter Smith was supported by a New Investigator Award from the Canadian Institutes of Health Research while undertaking this work, and is currently supported by a Discovery Early Career Research Award from the Australian Research Council. Approval for the secondary data analyses was obtained through the University of Toronto, Health Sciences I Ethics committee. This study was supported by the Institute for Clinical Evaluative Sciences (ICES), which is funded by an annual grant from the Ontario Ministry of Health and Long-Term Care (MOHLTC). The opinions, results and conclusions reported in this paper are those of the authors and are independent from the funding sources. No endorsement by ICES or the Ontario MOHLTC is intended or should be inferred.

Conflict of Interest: None to declare.

social work environment to those obtained from other health behaviours (smoking, alcohol consumption, physical activity, and fruit and vegetable consumption).

METHODS

This study used secondary data from Ontario respondents to the 2000-01 Canadian Community Health Survey (CCHS) linked to the Ontario Health Insurance Plan (OHIP) database covering physician services as well as the Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD) for hospital admissions, at the individual level. Follow-up information from the OHIP and CIHI-DAD databases was available up to March 31, 2010. For the purpose of this analysis, we focused on labour market participants aged 35 to 60 who: had not been previously diagnosed with hypertension (using both administrative health records and self-reported information from the CCHS); were not self-employed; and were working more than 10 hours per week, more than 20 weeks in the previous 12 months (N = 7,171).

Main outcome

Incidence of Hypertension

Incidence of hypertension was classified if respondents had one hospital admission with a hypertension diagnosis, or two physician service claims with a hypertension diagnosis within a two-year period (ICD9 codes 401, 402, 403, 404 or 405; ICD10 codes I10, I11, I12, I13, or I15).^{1,12} Previous work at the Institute for Clinical Evaluative Sciences has demonstrated that this classification of hypertension using medical records has a sensitivity of 73% and specificity of 95%, when compared to physician chart-recorded hypertension diagnoses.¹²

Main independent variables

Psychosocial Work Environment

Psychosocial working conditions included job control, psychological demands and social support, assessed by an abbreviated measure of the Job Content Questionnaire (JCQ).¹³ Job control and psychological demand measures were also combined to form a measure of job strain (where psychological demands are high and job control is low).

Health Behaviours

We had information on four health behaviours that may be associated with an elevated risk of hypertension. These were: leisure-time physical activity (inactive; moderately active; active); smoking status (never; former; occasional; 1-10 cigarettes per day; >10 cigarettes per day); alcohol consumption (non-drinker; non-binge drinker; binge drinker less than once per month; binge drinker once a month or more); and daily fruit and vegetable consumption (≥ 5 servings a day; <5 servings a day).

Potential confounders

Models were adjusted for a range of variables that may confound the relationship among working conditions, health behaviours and hypertension. These included: the respondent's shift schedule (regular; evening or night; rotating; other); the physical activity of their current occupation (usually sits; stands or walks about quite a lot,

Table 1. Frequencies of Main Independent Variables and Hypertension Incidence During a 9-year Follow-up, Stratified by Gender

	Males		Females	
	N	Hyper-tension Incidence	N	Hyper-tension Incidence
Working Conditions	3217	20.9%	3394	17.9%
Nature of Work				
Job control				
1 st quartile (high)	1089	18.3%	846	16.0%
2 nd quartile	884	20.8%	905	17.3%
3 rd quartile	604	19.2%	757	18.8%
4 th quartile (low)	639	27.0%	886	19.4%
Psychosocial demands				
1 st quartile (high)	484	22.2%	720	14.7%
2 nd quartile	1125	19.5%	1182	18.8%
3 rd quartile	877	23.2%	888	19.3%
4 th quartile (low)	730	19.4%	604	17.9%
Social support				
1 st quartile (high)	502	21.1%	516	18.8%
2 nd quartile	1051	19.1%	1193	17.4%
3 rd quartile	1103	21.4%	1062	18.3%
4 th quartile (low)	560	23.0%	622	17.2%
Health Behaviours				
Smoking				
Never	932	20.4%	1241	19.6%
Former	1305	22.9%	1308	16.7%
Occasional	150	23.9%	137	20.7%
1-10 per day	165	12.7%	256	18.4%
>10 per day	664	19.0%	452	15.4%
Physical activity				
Active	656	19.9%	548	15.2%
Moderately active	789	20.7%	796	14.9%
Inactive	1773	21.3%	2050	19.8%
Alcohol consumption				
Non-drinker	420	20.4%	508	19.9%
Non-binge drinker	1321	20.1%	2082	17.3%
Binge drinker less than once per month	706	21.8%	560	21.6%
Binge drinker once a month or more	770	21.7%	244	10.2%
Fruit and vegetable consumption				
≥ 5 servings a day	964	21.1%	1437	20.3%
<5 servings a day	2253	20.8%	1957	16.1%

Employees working more than 10 hours per week, more than 20 weeks in the previous 12 months (N=6611).

but does not carry or lift things; usually lifts or carries light loads, or has to climb stairs or hills often, or does heavy work or carries very heavy loads); the number of hours usually worked per week; if they worked less than 40 weeks in the previous 12 months (yes/no); if they were working multiple jobs (yes/no); ethnicity; immigration status and length of time in Canada; age (grouped); marital status; body mass index (grouped); living location (urban or rural); highest level of education completed; the presence of heart disease or diabetes at baseline (yes/no); and if the respondent had a long-term mental or physical health problem that limited the amount or the kind of activity they could do at work (yes/no).

Statistical methods

Our original sample of labour market participants aged 35-60 years, free of hypertension at baseline, totalled 7,171 respondents. Of this sample, 560 (7.8%) were missing information on ethnicity, length of time in Canada, sex, education level, information on working conditions or other covariates of interest, leaving a final sample of 6,611 respondents, i.e., 92.2% of the original sample. Older respondents, those who were female, and those with less than secondary education were more likely to be missing responses on work variables. Females were also more likely to be missing information on other covariates.

Cox-proportional hazard regression models examined the relationship between psychosocial work conditions and health behav-

Table 2. Adjusted* Hazard Ratios and 95% Confidence Intervals for Psychosocial Work Conditions and Health Behaviours on Risk of Hypertension During a 9-year Follow-up Stratified by Gender

	Males (N = 3,217)		Females (N = 3,394)	
	HR	95% CI	HR	95% CI
Psychosocial Work Environment				
Job control				
1 st quartile (high)	ref		ref	
2 nd quartile	1.28	(0.92-1.80)	0.97	(0.68-1.39)
3 rd quartile	1.25	(0.90-1.75)	1.01	(0.71-1.44)
4 th quartile (low)	1.85	(1.26-2.71)	0.96	(0.64-1.44)
Psychosocial demands				
1 st quartile (low)	ref		ref	
2 nd quartile	1.23	(0.85-1.77)	0.95	(0.63-1.44)
3 rd quartile	1.00	(0.72-1.39)	1.24	(0.88-1.74)
4 th quartile (high)	1.30	(0.94-1.79)	1.14	(0.79-1.64)
Social support				
1 st quartile (high)	ref		ref	
2 nd quartile	1.01	(0.68-1.49)	1.00	(0.67-1.48)
3 rd quartile	0.82	(0.58-1.16)	1.00	(0.71-1.40)
4 th quartile (low)	0.91	(0.67-1.25)	1.10	(0.78-1.54)
Health Behaviours				
Smoking				
Never	ref		ref	
Former	0.96	(0.71-1.31)	0.83	(0.61-1.13)
Occasional	1.31	(0.73-2.37)	0.99	(0.52-1.88)
1-10 per day	0.61	(0.33-1.15)	0.83	(0.52-1.30)
>10 per day	0.86	(0.60-1.23)	0.81	(0.56-1.19)
Physical activity				
Active	ref		ref	
Moderately active	1.02	(0.72-1.45)	0.97	(0.67-1.41)
Inactive	1.10	(0.79-1.52)	1.07	(0.75-1.51)
Alcohol consumption				
Non-drinker	ref		ref	
Non-binge drinker	1.04	(0.69-1.56)	1.24	(0.82-1.87)
Binge drinker less than once per month	1.23	(0.78-1.94)	1.92	(1.21-3.04)
Binge drinker once a month or more	1.21	(0.79-1.85)	1.01	(0.57-1.77)
Fruit and vegetable consumption				
≥5 servings a day	ref		ref	
<5 servings a day	1.03	(0.81-1.30)	0.81	(0.63-1.03)

Estimates associated with statistically significant increased risk of hypertension ($p < 0.05$) are **bolded**.

* Adjusted for age, immigration status, ethnicity, marital status, urban or rural living location, body mass index, education, heart disease at baseline, diabetes at baseline, activity limitations at work due to health problems, shift schedule, occupational physical activity, work hours, weeks worked in the previous 12 months and multiple jobs.

iors and the probability of hypertension diagnosis over the nine-year follow-up period. To account for the complex sample design of the CCHS, confidence intervals have been adjusted using a bootstrap technique.¹⁴ In addition, all analyses were weighted to account for the probability of selection into the original sample and non-response. All analyses were conducted using SAS 9.2.¹⁵ We also estimated the population attributable fraction of hypertension that would be reduced if specific modifiable risk factors were eliminated. This was done using the general formula: $PAF = pd \times [(HR_{adj} - 1)/HR_{adj}]$; where PAF = population attributable fraction; pd = proportion of the population with hypertension in each category; and HR_{adj} is the hazard ratio from the fully adjusted model.¹⁶ Due to previously noted differences in the impact of psychosocial work conditions on hypertension among men and women, all models were stratified by gender.^{11,17}

RESULTS

Table 1 presents descriptive information for hypertension incidence across our main independent variables. Over our study period, we had 53,573 person-years of follow-up (median follow-up 8.85 years); 19.4% of our study population developed hypertension, with a higher incidence among men (20.9%) than women (17.9%). Focusing on our main independent variables, higher incidence of hypertension was apparent across respondents with lower levels of job control, but these differences were far greater among men than women.

Table 2 presents the results of our regression models. Model one presents the hazard ratios for measures of the psychosocial work environment and health behaviours after adjustment for all confounders. Among men, a statistically significant elevated risk of hypertension was observed for respondents with the lowest levels of job control compared to those with the highest. Only irregular binge drinking (less than once per month) was associated with elevated hypertension risk among women, with no statistically significant relationships between health behaviours and hypertension observed among men. We also ran models with a measure of job strain (high psychological demands and low job control using the median split method) in place of psychological demands and job control. No relationship was observed between high job strain and incident hypertension among men or women (results available on request).

Table 3 presents the category-specific population attributable fraction (PAF) for psychosocial work conditions and health behaviours from our fully adjusted models. Among men, the PAF associated with low job control was 11.8%. Among women, a comparable PAF was associated with occasional binge drinking (11.5%). The highest PAF associated with a modifiable variable among both men and women was obesity, which had a PAF of 26.0% among men and 18.2% among women (results not shown but available on request).

DISCUSSION

The primary objective of this paper was to examine the relationships between the psychosocial work environment and hyper-

Table 3. Population Attributable Fractions for Modifiable Variables Included in Our Fully Adjusted Model, Stratified by Gender

	Males	Females
Psychosocial Work Environment		
Job control		
1 st quartile (high)	ref	ref
2 nd quartile	6.0%	-0.8%
3 rd quartile	3.4%	0.2%
4 th quartile (low)	11.8%	-1.2%
Psychosocial demands		
1 st quartile (low)	ref	ref
2 nd quartile	6.1%	-1.9%
3 rd quartile	0.0%	5.5%
4 th quartile (high)	4.9%	2.2%
Social support		
1 st quartile (high)	ref	ref
2 nd quartile	0.3%	0.0%
3 rd quartile	-7.7%	0.0%
4 th quartile (low)	-1.9%	1.6%
Health Behaviours		
Smoking		
Never	ref	ref
Former	-1.9%	-7.4%
Occasional	1.3%	0.0%
1-10 per day	-2.0%	-1.6%
>10 per day	-3.1%	-2.7%
Physical activity		
Active	ref	ref
Moderately active	0.5%	-0.6%
Inactive	5.1%	4.4%
Alcohol consumption		
Non-drinker	ref	ref
Non-binge drinker	1.5%	11.5%
Binge drinker less than once per month	4.3%	9.5%
Binge drinker once a month or more	4.3%	0.0%
Fruit and vegetable consumption		
≥5 servings a day	ref	ref
<5 servings a day	2.0%	-12.2%

tension among employed respondents in Ontario over a 9-year period, and to compare the risks associated with the psychosocial work environment to those obtained from health behaviours (smoking, alcohol consumption, physical activity, and fruit and vegetable consumption). We found that low job control was associated with an increased risk of hypertension among men, but not among women. We also found that occasional binge drinking was associated with an increased risk of hypertension among women. These findings suggest that job control is also an important modifiable risk factor for hypertension in Ontario among male labour market participants.

The results of this study support previous research in Canada demonstrating that the psychosocial work environment is an important determinant of hypertension risk among men, but not among women.¹¹ However, unlike this previous study, we found only a relationship between job control and hypertension, and not job strain (the combination of low job control and high psychological demands). Further comparisons of our study with this previous study are hampered by the differing classification of outcomes between these two studies, with measured blood pressure used in the previous study, while we relied upon administrative records. However, our finding that low job control is more important than psychological demands and social support in determining cardiovascular risk is congruent with results from studies on British Civil Servants.¹⁸ Low job control was the only work-related variable in our fully adjusted model associated with an increased risk of hypertension (albeit only among men). Unlike the previous Canadian studies examining the impact of sitting at work and cardiovascular risk,^{19,20} we did not find a relationship between self-reported physical demands of work and incident hypertension.

The results of this study, however, should be interpreted within the context of the following limitations. Our study relied upon administrative health care records to determine incident hypertension over our follow-up period. As such, there may be a proportion of our sample that are hypertensive, but remain undiagnosed. We did examine the last contact with the health care system across respondents in our sample, and found that 99% had contact with the health care system during our follow-up period, with 85% having their last contact in our last three years of follow-up. There may be more barriers to health care utilization across lower socio-economic participants in our sample. Given that low job control is associated with lower socio-economic position,²¹ the hazards associated with low job control in our sample may be biased to the null. While this is a concern in any study using health care data, Ontario has universal health coverage, with studies finding socio-economic differences in health care in Canada being predominantly associated with specialist care, but not general practitioner care.^{22,23} We did not have information on the length of time respondents were exposed to each working condition, or subsequent changes in health behaviours, which may lead to misclassification, biasing the results reported here to the null.²⁴ The exclusion of participants with hypertension from our baseline sample may have produced a population who are less susceptible to certain hypertension determinants (e.g., health behaviours) relative to others (e.g., low job control). This may be one reason for the lack of effect of health behaviours on hypertension risk in this sample. However, the exclusion of hypertensive respondents was required in order to ensure the correct temporality between our main independent variables and the study outcome. Our study also has a number of strengths, including a large representative data source containing information on a wide variety of information on working conditions, health behaviours and other socio-demographic variables, allowing for one of the first longitudinal examinations of the relationships between the psychosocial work environment and hypertension in Canada.

Our findings underpin the importance of psychosocial working conditions – in particular, control at work – in understanding the social patterning of diseases such as hypertension. We did not observe a strong relationship between health behaviours and hypertension in our sample, with the exception of non-regular binge drinking among women. However, while primary prevention programs in Canada and elsewhere often target health behaviours as determining hypertension risk, very little attention is given to the impact that the working environment may have on the development of hypertension. In this study, the PAFs for job control were second only to obesity among men. As such, the inclusion of aspects of work – in particular, job control among men – should be considered along with health behaviours as part of a comprehensive primary prevention strategy for hypertension in Canada.

REFERENCES

1. Tu K, Chen ZL, Lipscombe LL. Prevalence and incidence of hypertension from 1995 to 2005: A population-based study. *CMAJ* 2008;178:1429-35.
2. Katzmarzyk PT, Mason C. Prevalence of class I, II and III obesity in Canada. *CMAJ* 2006;174:156-57.
3. Smith P, Frank J, Mustard C. The monitoring and surveillance of the psychosocial work environment in Canada: A forgotten determinant of health. *Can J Public Health* 2008;99:475-77.
4. Steptoe A, Cropley M, Joeekes K. Job strain, blood pressure and response to uncontrollable stress. *J Hypertension* 1999;17:193-200.

5. Steptoe A, Siegrist J, Kirschbaum C, Marmot M. Effort-reward imbalance, over-commitment, and measures of cortisol and blood pressure over the working day. *Psychosomatic Med* 2004;66:323-29.
6. Hemingway H, Marmot MG. Psychosocial factors in the aetiology and prognosis of coronary heart disease: Systematic review of prospective cohort studies. *BMJ* 1999;318:1460-67.
7. Bourbonnais R, Brisson C, Vinet A, Vezina M, Abdous B, Gaudet M. Effectiveness of a participative intervention on psychosocial work factors to prevent mental health problems in a hospital setting. *Occup Environ Med* 2006;63:335-42.
8. Gilbert-Ouimet M, Brisson C, Vezina M, Trudel L, Bourbonnais R, Masse B, et al. An intervention study on psychosocial work factors and mental health and musculoskeletal outcomes. *Healthcare Papers* 2011;11(Sp):47-66.
9. Brisson C, Laflamme N, Moisan J, Milot A, Masse B, Vezina M. Effect of family responsibilities and job strain on ambulatory blood pressure among white-collar women. *Psychosom Med* 1999;61:205-13.
10. Laflamme N, Brisson C, Moisan J, Milot A, Masse B, Vezina M. Job strain and ambulatory blood pressure among female white-collar workers. *Scand J Work Environ Health* 1998;24:334-43.
11. Guimont C, Brisson C, Dagenais GR, Milot A, Vezina M, Masse B, et al. Effects of job strain on blood pressure: A prospective study of male and female white-collar workers. *Am J Public Health* 2006;96:1436-43.
12. Tu K, Campbell NRC, Chen ZL, Cauch-Dudek J, McAlister FA. Accuracy of administrative databases in identifying patients with hypertension. *Open Med* 2007;1:E18-E26.
13. Karasek R, Theorell T. *Healthy Work: Stress Productivity and the Reconstruction of Working Life*. New York, NY: Basic Books Inc., 1990.
14. Yeo D, Mantel H, Liu TP. Bootstrap variance estimation for the National Population Health Survey. American Statistical Association Conference, Baltimore, MD, 1999;778-83.
15. The SAS Institute. The SAS System for Windows, Release 9.2. 2010.
16. Hennekens CH, Buring JE. Measures of disease frequency and association. In: Mayrent SL (Ed.), *Epidemiology in Medicine*. Toronto, ON: Little, Brown and Company, 1987;54-98.
17. Belkic KL, Landsbergis PA, Schnall PL, Baker D. Is job strain a major source of cardiovascular disease risk? *Scand J Work Environ Health* 2004;30:85-128.
18. Bosma H, Marmot MG, Hemingway H, Nicholson AC, Brunner E, Stansfeld SA. Low job control and risk of coronary heart disease in Whitehall II (prospective cohort) study. *BMJ* 1997;314:558-65.
19. Probert AW, Tremblay MS, Gorber SC. Desk potatoes: The importance of occupational physical activity on health. *Can J Public Health* 2008;99:311-18.
20. Katzmarzyk PT, Church TS, Craig CL, Bouchard C. Sitting time and mortality from all causes, cardiovascular disease, and cancer. *Med Sci Sports Exerc* 2009;41:998-1005.
21. Smith PM, Frank JW, Mustard CA, Bondy S. Examining the relationships between job control and health status: A path analysis approach. *J Epidemiol Community Health* 2008;62:54-61.
22. Roos NP, Mustard CA. Variation in health and health care use by socioeconomic status in Winnipeg, Canada: Does the system work well? Yes and no. *Milbank Q* 1997;75:89-111.
23. Glazier RH, Agha MM, Moineddin R, Sibley LM. Universal health insurance and equity in primary care and specialist office visits: A population-based study. *Ann Fam Med* 2009;7:396-405.
24. Stringhini S, Sabia S, Shipley M, Brunner E, Nabi H, Kivimaki M, Singh-Manoux A. Association of socioeconomic position with health behaviors and mortality. *JAMA* 2010;303:1159-66.

Received: July 10, 2012
Accepted: November 22, 2012

RÉSUMÉ

OBJECTIFS : L'hypertension artérielle est un problème de santé qui gagne en importance au Canada. Nous avons comparé sur une période de neuf ans les risques d'hypertension associés aux conditions de travail psychosociales et ceux associés aux habitudes de santé en Ontario, au Canada.

MÉTHODE : Nous avons utilisé les données fournies par les répondants ontariens de l'Enquête sur la santé dans les collectivités canadiennes de 2000-2001 et nous les avons reliées à la base de données de l'Assurance-santé de l'Ontario, qui couvre les services médicaux, et à la base de données de l'Institut canadien d'information sur la santé pour ce qui est des hospitalisations. Nous nous sommes limités aux actifs de 35 à 60 ans n'ayant jamais reçu de diagnostic d'hypertension, n'étant pas travailleurs autonomes et ayant travaillé plus de 10 heures par semaine pendant plus de 20 semaines au cours des 12 mois précédents (N = 6 611). Les sujets ont été suivis sur une période de neuf ans pour vérifier leur incidence d'hypertension.

RÉSULTATS : Le faible contrôle sur le travail était associé à un risque accru d'hypertension chez les hommes, mais pas chez les femmes. Chez les hommes, la fraction attribuable dans la population associée au faible contrôle sur le travail était de 11,8 % dans notre modèle entièrement ajusté. Nous n'avons pas observé de hausse systématique du risque d'hypertension entre les différents niveaux d'habitudes de santé.

CONCLUSION : Les efforts de prévention primaire qui visent à réduire l'incidence de l'hypertension ciblent surtout les habitudes de santé modifiables. Selon les preuves de cette étude de cohorte longitudinale, les caractéristiques modifiables du milieu de travail devraient aussi être prises en considération lorsqu'on conçoit des programmes de prévention des maladies cardiovasculaires, en particulier pour les actifs de sexe masculin.

MOTS CLÉS : hypertension artérielle; facteurs psychosociaux; travail; sexe