

Smoking Status, Exercise, and Body Mass Index

Three cardiovascular risk factors were examined: smoking, lack of exercise, and increased BMI. Smokers were defined as subjects smoking at least 1 cigarette per day for more than 1 year. Smoking intensity was defined as the self-reported average number of cigarettes smoked per day. Lack of exercise was defined as exercising less than once weekly in the last 6 months. One exercise session was a rigorous physical activity during leisure time, which lasted at least 20 min and after which the subject had to catch his breath. BMI was computed as weight (kg)/height (m²).

Other Variables

All other variables were evaluated as potential confounders. Demographic variables including age and level of education were completed. Physical activity at work was graded from 1 to 4. A value of 1 corresponded to work in which people sat most of the time and did not need to walk much, while 4 corresponded to physically straining work that required people to carry heavy objects defined as a weight of more than 3 kg.

Analyses

The associations between smoking, lack of exer-

cise, and increased BMI, and quartiles of decision latitude and quartiles of the psychological demands were assessed in separate analyses. Crude and adjusted means of the number of cigarettes per day (among smokers) and BMI were compared by quartiles of decision latitude and psychological demands and by job strain categories using covariance analysis.²³ Logistic regression²⁴ was performed to test the relationships between these occupational stress factors and the prevalence of smoking and lack of exercise. All analyses were performed with SPSS 9.0 (Chicago, IL) for Windows.²⁵

RESULTS

Characteristics of subjects are presented in Table 1. The number of cigarettes smoked per day was consistently associated with quartiles of decision latitude and job strain categories. There were no significant differences in BMI associated with decision latitude and psychological demand quartiles, or the number of cigarettes smoked per day according to psychological demand quartiles in our subjects (Table 2). The number of cigarettes smoked per day was consistently as-

Table 1. Characteristics of Subjects

	N = 534
<i>Sociodemographic data and health-related behaviors</i>	
Age (year) ^a	48.3 ± 0.6
Alcohol consumption (%)	39.4
Education (%): illiterate or elementary school	1.3
High school	20.6
College or above	78.1
<i>Occupational stress factors</i>	
Decision latitude ^a	65.3 ± 0.6
Psychological demands ^a	45.6 ± 0.2
Low strain (PD-DL+) (%)	17.4
Active (PD+DL+) (%)	29.7
Passive (PD-DL-) (%)	33.3
High strain (PD+DL-) (%)	19.6
<i>Smoking status, exercise, and body mass index</i>	
Daily smokers (%)	29.5
Among smokers, number of cigarettes/day ^a	18.4 ± 0.6
Lack of exercise (%)	35.8
BMI ^b (kg/m ²) ^a	28.2 ± 0.3

^a Mean ± standard error.

^b BMI, body mass index.

Table 2. Mean Levels ± Standard Errors (SE) of Body Mass Index and Number of Cigarettes Smoked per Day by Quartiles of Decision Latitude and Psychological Demands

	Body mass index (kg/m ²)	Cigarettes/day
	Mean ^a ± SE	Mean ^a ± SE
<i>Decision latitude</i>		
Q1 (Low)	27.8 ± 0.3	18.0 ± 0.9
Q2	28.5 ± 0.3	18.2 ± 0.7
Q3	27.7 ± 0.2	18.6 ± 0.8
Q4 (High)	26.6 ± 0.1	18.9 ± 0.8*
<i>Psychological demands</i>		
Q1 (Low)	28.3 ± 0.2	18.6 ± 0.8
Q2	28.1 ± 0.3	17.8 ± 0.8
Q3	27.9 ± 0.1	17.9 ± 1.0
Q4 (High)	28.5 ± 0.2	18.7 ± 0.9

* Significant trend after adjustment for age, level of education, physical activity at work and, alcohol consumption ($p < 0.05$) using covariance analysis.

^a Means are adjusted for age, level of education, physical activity at work, and alcohol consumption.