Physical exertion at work and addictive behaviors: tobacco, cannabis, alcohol, sugar and fat consumption: longitudinal analyses in the CONSTANCES cohort

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ABSTRACT

Objectives: This study examined the prospective association of physical exertion at work with risk of tobacco, cannabis, alcohol use and sugar and fat consumption.

Materials and methods: Volunteers of the French population-based CONSTANCES cohort currently employed were included from 2012 to 2017 for tobacco and cannabis outcomes (n=100,612), and from 2012 to 2016 for alcohol and sugar and fat outcomes (n=75,414). High level of physical exertion was defined as a score $\geq$12 at the Rating Perceived Exertion Borg scale. Substance use was self-reported and patterns of sugar and fat intakes were obtained from principal component analysis and used in quartiles. Generalized linear models computed odds of substance use and sugar and fat consumption at follow-up according to baseline physical exertion at work, while adjusting for sociodemographic factors, depressive symptoms and baseline level of consumption.

Results and conclusions: High physical exertion was associated with tobacco use, i.e.: increased odd of relapse in former smokers (OR:1.13, 95% confidence Interval (CI):1.02-1.24), and increased number of cigarettes per day in current smokers (OR:1.54, 95%CI:1.33-1.78) with dose-dependent relationships (*P* for trend<0.001). It was also associated with increased odd of cannabis use at least once per month compared to no use in the past year (OR:1.31, 95%CI:1.03-1.66) and with increased odds of sugar and fat consumption (OR:1.06, 95%CI:1.01-1.11 and OR:1.13, 95%CI:1.07-1.18, for third and fourth quartiles compared to the first, respectively). As a conclusion, the associations between physical exertion at work and subsequent tobacco and cannabis use and sugar and fat consumption should be taken into account for information and prevention strategies.

TYPE OF PRESENTATION

Oral presentation

CONFLICTS OF INTEREST