

Lifestyle and work predictors of fatigue in Japanese manufacturing workers

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Abstract

Background: Fatigue is one of the most common symptoms encountered in medical practice. However, little is known about the causal relationship between change in lifestyle and fatigue.

Aim: To help prevent fatigue-related disorders, we investigated the association between changes in lifestyle and fatigue among employees.

Methods: We studied datasets from the High-risk and Population Strategy for Occupational Health Promotion (HIPOP-OHP) Study for employees at 10 workplaces in Japan. The baseline survey was done in 1999 and the follow-up survey in 2003 via a questionnaire which examined lifestyle and fatigue variables using the vitality domain scale of the SF-36 Health Survey. The lifestyle factors focused on were diet, smoking and alcohol habits, and working conditions. Four-year changes in lifestyle that predicted the vitality domain score in the follow-up survey were examined by analysis of covariance

Results: Of the 6284 participants in the baseline survey, 4507 replied to the follow-up survey, of whom 3498, with a mean age of 37 (SD 18) years, returned valid responses. A low vitality score at follow-up was predicted by a change in lifestyle factors such as an increase in overtime work, change to non-sedentary work, and increased frequency of eating between meals ($p < 0.01$, $p < 0.01$ and $p = 0.02$, respectively).

Conclusion: Fatigue in salaried workers as measured by the vitality domain of the SF-36 is predicted by an increase in overtime work, change to non-sedentary work, and an increase in the frequency of eating between meals.

日本語要旨

本研究の目的は、SF-36 の Vitality(VT: 活力、疲れ)ドメインに関連する生活習慣を明らかにすることである。青・壮年を対象とした生活習慣病予防のための長期介入研究において、1999 年のベースライン調査と 2003 年の追跡調査に共に回答した、国内の 10 事業所に勤務する者を対象とした。追跡調査で測定した VT をアウトカム変数、喫煙、飲酒、食習慣、労働の変化等を説明変数として、それらの関連性を検討した。解析対象とした者は 3498 名(うち男性 79.6%)であった。4 年間で残業が増えた群、重労働になった群および喫煙するようになった群は、それらが変化しなかった群に比較し追跡調査時の VT スコアが低かった。また、間食の回数が減った群は追跡調査時の VT スコアが高かった。