Abstracts

1155 MINI BREAK INTERVENTION IN PREVENTING ASTHENOPIA AMONG DRAWING WORKERS USING STANDARD AND WIDESCREEN SIZE VDT AT CONSTRUCTION COMPANY IN JAKARTA

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Introduction Asthenopia has the effect of decreasing work productivity and health condition. Although the computer has not been proven to make permanent damage to the eyes but temporary discomfort due to tired eyes can reduce productivity. The impact is on lost working hours and reduced job satisfaction. In Indonesia, In a diagnostic test of tired eye screening tool for office workers in north Jakarta, asthenopia prevalence was found at 80%. Asthenopia among drawing workers is becoming my attention because there are significant number of drawing workers as office workers in Jakarta, Indonesia and limited data regarding their health effect from their work

Methods This is an experimental study with cross over design. The number of subjects who participated in this study were 66 participants. Intervention of no mini break and mini break were given to workers who used VDT size 4:3 and VDT size 16:9. Data was revealed from the difference of NPC before and after 4 hours of VDT exposure and 4 hours of exposure with a 15 min mini break after 2 hours of work to both groups (sub group of VDT 4:3 and VDT 16:9) using RAF (Royal Air Force) ruler.

Results The users of VDT size 4:3 have difference of NPC 2,89±1,11 cm in no mini break intervention and 1,42 ±1,01 cm in mini break intervention. The users of VDT size 16:9 have difference NPC 3,02±1,04 cm in no mini break intervention and 1,41±1,10 cm in mini break intervention. The difference of convergence power between no mini break and mini break intervention for VDT size 4:3 (p=0.000) and size 16:9 users (p=0.000) was statistically significant. There was no significant difference statistically in convergence power in no mini break intervention between VDT size 4:3 and size 16:9 users (p=0.6251) and neither in mini break intervention between VDT size 4:3 and 16:9 users (p=0.9694).

Conclusion The convergence power is different significantly between working without mini break and with mini break in both of VDT users size 4:3 and 16:9. There is no difference significantly between VDT users size 4:3 and 16:9 in no mini break intervention as well as mini break intervention. This is probably because the measurement is only based on NPC and experimental limitations. It takes other parameters to measure asthenopia due to VDT usage as asthenopia is a sign of computer vision syndrome.

486 TOTAL BURDEN OF PRESENTEEISM, ABSENTEEISM AND MEDICAL/PHARMACEUTICAL COST BY HEALTH RISKS


Introduction Presenteeism is a significant problem in modern societies, and it is associated with a wide range of adverse effects on both employees and employers. Absenteeism and healthcare costs are also important issues in occupational health and safety. The aim of this study was to estimate the total burden of presenteeism, absenteeism, and medical/ pharmaceutical costs by health risks in a Japanese manufacturing company.

Methods A cross-sectional study was conducted in a Japanese manufacturing company. The study population included all full-time employees. The presenteeism was measured using a validated questionnaire. Absenteeism was calculated based on the number of sick leave days. Medical/pharmaceutical costs were estimated using data from the company’s insurance program.

Results The total burden of presenteeism, absenteeism, and medical/pharmaceutical costs was estimated to be X million yen. This burden was higher in employees with health risks such as musculoskeletal disorders and mental health problems.

Discussion The results suggest that interventions focused on reducing presenteeism and absenteeism can significantly reduce the overall burden of illness in the workplace. Further research is needed to develop effective interventions and policies to address these issues.
Introduction

Precarious employment is considered an emerging social determinant of health; its prevalence is increasing and its study remains in its infancy. The objective of this study is to describe the prevalence of precarious employment in the European Union (EU-28) using a multidimensional approach, 8 years into the economic crisis.

Methods

This is a cross-sectional study based on data from the Flash Eurobarometer 398 among salaried workers of the EU-28 from 2014 (N=7702). We derived 4 factors of precarious employment (not having the ability to exercise rights, vulnerability, disempowerment and temporariness) from several items of the questionnaire. We calculated the proportions and their 95% confidence intervals (95% CI) for each of the precarious employment factors. Also, we calculated the prevalence of precarious employment (having at least one factor) and the proportion of workers presenting 1, 2, 3 or 4 factors of precarious employment. All analyses were stratified by age, sex, at the end of education and welfare regime.

Results

66.38% (95% CI: 60.58 to 71.72) of the salaried European workers had precarious employment. The prevalence of precarious employment was higher in Eastern European countries (72.64%; 95% CI: 61.78 to 81.34) than Nordic European countries (51.09%; 95% CI: 44.38 to 57.77). No differences were found according to sex, age, or age at the end of education. The most prevalent factor was not having the ability to exercise rights (42.40%), followed by disempowerment (31.44%), vulnerability (12.41%) and temporariness (11.36%).

Discussion

2 out of 3 European salaried workers suffer precarious employment. Precariousness is widespread among the salaried working population as shown by the similar prevalence found between men and women, workers of different ages and age at the end of education. The European Commission should consider new forms of employment and legislate accordingly to avoid an increase in precarious employment.