Discussion

Despite difficulties to the practice of napping on the job, the promising results for both BP and BMI justify further investigations that could subsidise policies related to promoting adequate conditions for night workers to nap while on the job.

1602f PRACTICAL GUIDELINES FOR LINKING BETTER WORKING TIME ARRANGEMENTS WITH STRESS PREVENTION AT WORK

Kazutaka Kogi*, Y Sano. Ohzaka Memorial Institute for Science of Labour, Japan

10.1136/oemed-2018-ICOHabstracts.1386

Introduction

Multifaceted work redesign is always involved in improving working time arrangements. Recent experiences in improving work systems with excessive work hours or overworking situations clearly show the need to link better working schedules with comprehensive measures to reduce stress at work. It is useful to know practical ways to facilitate joint changes or work schedules and job content.

Methods

Typical types of improvements undertaken in participatory programmes for joint improvement of working time arrangements and job content for preventing stress at work were compared. The programmes studied included participatory occupational health activities of health care workers, local government employees and small enterprise workers. The common features of the participatory steps that facilitated the joint change process and the roles of trained facilitators were examined. The results were discussed to compile practical guidelines for linking better work schedules with other multifaceted stress-reducing improvements.

Results

Multiple aspects addressed by the reviewed programmes commonly included team-based communication, work schedules, ergonomic work methods, physical environment and social support. Work schedule changes were usually combined with enhanced communication or improved work methods. It was found useful to utilise action-oriented tools such as action checklists reflecting local good practices and group work methods for proposing feasible improvements. New guidelines for organising participatory steps for the joint change of work schedules and job content were compiled with emphasis on simple group work procedures and the use of action-oriented checklists for proposing multifaceted actions.

Conclusions

The participatory steps utilising action-oriented checklists and local good practices proved useful for facilitating planning and implementation of multifaceted improvements in work schedules and job content in the local context. It is suggested to organise participatory activities referring to the new guidelines compiling these positive features in linking working time arrangements and stress prevention at work.

1602g SHIFT WORK, AUTOMATED VEHICLES, AND FUNCTIONAL IMPAIRMENTS IN TRANSPORTATION


10.1136/oemed-2018-ICOHabstracts.1387

Introduction

Shiftwork has been linked to functional impairments such as fatigue and distraction that increase crash risk. Automated vehicles may decrease these risk factors. Simultaneously, automated vehicles will allow a broader range of ‘drivers’ to operate the vehicle such as those with cognitive and physical impairments, creating additional benefits and impacts to shiftworking drivers with such impairments. We have developed a conceptual model of how automation at all levels can be used to reduce the impacts of shiftwork on functional impairments in transportation.

Methods

Over 100 articles were reviewed in the areas of shiftwork, automation, and functional impairment using established key words and recognised search domains. Central to the understanding of the relations among shiftwork, automation and functional impairments is knowledge of how drivers use, misuse, disuse and are abused by automation.

Results

The result of the literature search and its analysis is a conceptual model which clarifies how shiftwork impacts the use, misuse and disuse of automation at each level, and how those impacts affect drivers with different types and levels of functional impairment. Existing research suggests that long shifts can lead to an increase in the misuse of automation, with fatigued and distracted drivers over-trusting automation. This effect will be magnified for those with cognitive impairments. However, systems are now deployed that can detect driver state such as fatigue and distraction, and could potentially communicate with an automatic driving suite and intervene when the driver is fatigued or distracted.

Discussion

The conceptual model creates a roadmap for future research, applications and regulations that various stakeholders can use to improve the safety and well-being of shiftworkers.
The development of practical recommendations for shift work, the definition of duration and intensity of night shift rotation and shift schedules significance, taking into account the individual characteristics of workers (for example, the chronotype), requires further studies, as well as the issue of potential carcinogenic risk of shift work.

148
SHIFT WORK AND WORKPLACE VIOLENCE AGAINST HEALTHCARE WORKERS IN PSYCHIATRIC WARDS: A CASE-CONTROL STUDY
G d’Ettore1*, V Pellicani2. 1Local Health Authority of Brindisi (ASL BR), Department of Occupational Medicine, Italy

2Local Health Authority of Lecce (ASL LE), Department of Mental Health, Italy

Introduction Workplace violence (WPV) towards healthcare workers (HCWs) employed in psychiatric wards (PWs) represents a concern for healthcare organisations, globally. To date there is a lack of scientific data about the relationship between work-shifts and the occurrence of WPV against PW HCWs. The aim of the present study was to investigate the relationship between work shift schedules and WPV among registered nurses (RNs) working on non-traditional shifts, including nights and 12 hour shifts.

Methods The authors conducted a cross-sectional nested case-control analysis of data regarding the episodes of WPV perpetrated by patients or their relatives against RNs employed in two PWs, in the period between January–December 2016. Results The one-year incidence of WPV was 31.50 per 100 Full Time Equivalent (FTE) positions. Cumulative nightshifts were significant for 3 or more nightshifts compared to working less than 3 nightshifts during the 7 days prior to the occurrence of WPV; additionally, RNs working 9 or more night-shifts showed higher risk of experiencing WPV compared to RNs working less than 4 night-shifts in the previous 28 days.

Discussion In the present study the occurrence of WPV against PW RNs was significantly correlated with shift-work; as consequence, the findings support the need of organisational interventions aimed at preventing the WPV and targeted on the management of shift-work schedules, with the aim of:

- limiting the night shifts up to two per week and up eight per month;
- adopting constant forward-rotating shift schedules.

1076
THE IMPACT OF SHIFTWORK ON SLEEP QUALITY AMONG NHS NURSES
1K McDowell**, 1E Murphy, 1K Anderson, 1Occupational Health Service, Newcastle Hospitals NHS Foundation Trust, UK; 2Neurology Department, Newcastle Hospitals NHS Foundation Trust, UK

Introduction Shiftwork is common amongst nurses and it is known to be a workplace hazard as it may cause poor sleep quality, which can impact adversely on the health and safety of nurses and their patients. The aims of this study were to identify and describe the association between poor sleep quality and shiftwork in nurses. Additionally, to explore factors that contribute to poor sleep quality and to assess the awareness of support from Occupational Health (OH).

Methods Cross-sectional study of nurses at a National Health Service Foundation Trust, February to March 2016. Data was collected via an online questionnaire. Sleep quality was measured using the Pittsburgh Sleep Quality Index.

Result 888 nurses participated; 34% response rate. The prevalence of poor sleep quality was 78% (95% CI: 0.748 to 0.813) in the shift working nurses (SWNs), compared to 59% (95% CI: 0.503 to 0.678) in the non-shift working nurses (NSWNs). There was a mean sleep quality score difference of 1.58 between the SWNs and the NSWNs, which was statistically significant, p<0.001 (95% CI: 0.913 to 2.246). Undertaking shiftwork was the only significant association with poor sleep quality, when controlling for the other variables of age, gender and number of years worked, OR 0.410 p<0.001 (95% CI: 0.265 to 0.634).