

they cause occupational illness. The widespread use of FeNO level measurement will be beneficial for the protection and development of workers' health.

Poster Presentation

Ageing Workforce

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WORK STRESS MEASURES ARE ASSOCIATED WITH HEALTH AND PHYSICAL FUNCTION AROUND THE AGE OF RETIREMENT: FINDINGS FROM THE HERTFORDSHIRE COHORT STUDY

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Background Studies such as Whitehall II have shown that poor psychosocial work conditions are associated with ill health among employees; it is unclear whether these effects persist and affect health in later life. We have addressed this question using data from the Hertfordshire Cohort Study (HCS).

Method 1021 men and 753 women (59–73 years of age) underwent a home interview and clinical examination and completed a social health questionnaire detailing job-strain (JS) and effort-reward imbalance (ERI) in the current or most recent job.

Logistic and linear regression were used to compare the health of participants who reported JS and/or ERI with those who reported neither.

Results 61% reported neither JS or ERI whilst 10% reported both. 72% were no longer working. JS/ERI was not associated with cardiovascular outcomes (stroke, ischaemic heart disease, hypertension) or type II diabetes. However, participants who reported both JS and ERI had increased odds of poor physical function (SF-36) in comparison with those who reported neither (odds ratios: 2.3 [95%CI 1.5,3.7] men; 2.0 [95%CI 1.2,3.6] women). Average grip strength was 1.7 kg [95% CI 0.2,3.3] lower among men who reported both JS and ERI compared to those reporting neither.

Similarly, participants reporting both JS and ERI had poorer SF-36 mental health in comparison with those reporting neither (odds ratios: 2.8 [95%CI 1.8,4.4] men; 3.1 [95% CI 1.8,5.3] women).

Conclusions JS and ERI in combination are associated with poor physical and mental health outcomes in later life.

Further prospective research is required to determine the causal chain of these associations.

Poster Presentation

Ageing Workforce

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BODY MASS INDEX (BMI), CHRONIC MUSCULOSKELETAL PAIN AND ADVERSE EMPLOYMENT OUTCOMES IN OLDER WORKERS: THE HEALTH AND EMPLOYMENT AFTER FIFTY (HEAF) STUDY

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Introduction The combination of an ageing population and an obesity epidemic has important health and economic implications, with growing numbers of older people remaining in work. Obesity is a risk factor for musculoskeletal disorders, which are often more common and severe at older ages and limit work capacity. As part of a longitudinal cohort study on the impact of health on employment in later life, we explored the relation between BMI, chronic musculoskeletal pain and employment outcomes.

Methods Some 8,000 50–64 year-olds recruited from 24 English general practices completed a baseline postal questionnaire about work, home circumstances and measures of health. Logistic regression was used to explore associations between BMI and pain (lasting >1 month in the past year and interfering with everyday activity) and work outcomes (health-related job loss, prolonged sickness absence, cutting down at work), adjusting for educational background and mental health.

Results A total of 7585 participants were included, 861 of whom were not in work for a health reason. More than a quarter (26%) of participants reported chronic pain and almost a quarter were obese. Adverse work outcomes were only weakly associated with obesity on its own but strongly associated with the combination of chronic pain and obesity (OR range 3.9–6.8). Significant associations were also seen in the underweight group (BMI <18.5) (OR range 3.9–14.1).

Conclusions Prevention of chronic pain and obesity is important, but weight control is of particular importance in older workers with musculoskeletal problems, in terms of work capability and job retention.