BCS70 (collected at age 10). Adult psychological well-being (NCDS=age 33; BCS70=age 30) was indicated by psychological ill health and self-efficacy. Adult psychological ill health was indicated by the Malaise Inventory with a cutoff point of 7 or above. Self-efficacy was derived from the response to questions asking the study participants about their perceived level of control over their life.

**Methods** A dichotomised index of childhood adversity was created after tabulating information about parenthood, mother's age, mother's education, and presence of older siblings. The effect of breast feeding on childhood psychosocial adjustment and adult psychological well-being was examined using logistic regression. Men and women were analysed separately and the effects of breast feeding on the outcomes were adjusted for confounders.

**Results** Findings showed that the magnitude of the effect of breast feeding on adult psychological well-being is larger in women than in men. After accounting for the effect of childhood social adversity, breast feeding promoted psychosocial adjustment during childhood in girls in NCDS (OR 1.25, 95% CI 1.05 to 1.48) and in BCS70 (OR 1.44, 95% CI 1.15 to 1.81), but not in boys.

In adulthood, being breast fed at birth was associated with higher self-efficacy (OR 1.31, 95% CI 1.06 to to 1.61) and lower risk of psychological ill health (OR 0.76, 95% CI 0.61 to to 0.96) in women in BCS70 only. However, no significant interaction effect was found between breast feeding and childhood social adversity.

**Conclusion** Although breast feeding did not moderate the negative effect of childhood social adversity on childhood or adulthood outcomes in this study, findings suggest that the practice of breast feeding can be important for women's psychological well-being throughout the lifecourse.

012

## BREAST FEEDING AND BEHAVIOURAL DEVELOPMENT IN CHILDREN: FINDINGS FROM THE MILLENNIUM COHORT STUDY

doi:10.1136/jech.2010.120956.12

<sup>1</sup>K Heikkilä, <sup>2</sup>A Sacker, <sup>3</sup>Y Kelly, <sup>4</sup>M J Renfrew, <sup>1</sup>M A Quigley. <sup>1</sup>National Perinatal Epidemiology Unit, University of Oxford, UK; <sup>2</sup>Institute for Social and Economic Research, University of Essex, UK; <sup>3</sup>Department of Epidemiology and Public Health, University College London, UK; <sup>4</sup>Mother and Infant Research Unit, University of York, UK

**Aim** Our aim was to examine whether breast feeding is associated with behavioural development in children aged 5 years.

**Methods** We used data from a large, prospective, nationally representative UK cohort, the Millennium Cohort Study. Breast feeding was ascertained from parent-interviews at baseline and child behaviour from parent-rated outcome, the Strengths and Difficulties Questionnaire (SDQ). Our analyses included 10 037 mother-child pairs with data on breast feeding, SDQ and potential confounders. 9525 of the children were born at term and 512 were preterm. We used logistic regression models to investigate the associations of breast feeding duration with abnormal parent-rated SDQ total and sub-scores at age five in term and preterm children separately.

**Results** Overall, abnormal SDQ scores were less common in breast fed than formula-fed children. Term children breast fed for four months or longer had lower odds of an abnormal total SDQ score (multivariable-adjusted OR compared to never breast fed children: 0.65, 95% CI 0.52 to 0.82). This effect was similar for all the SDQ sub-scores. In preterm children prolonged breast feeding was generally associated with lower odds of abnormal SDQ total and sub-scores but the effect estimates were imprecise. The associations between exclusive breast feeding and abnormal SDQ scores were similar to those of any breast feeding and abnormal SDQ scores.

**Conclusions** Our findings suggest that, at least in term children, prolonged breast feeding is associated with having fewer parent-rated behavioural problems at the age of 5 years.

## (Un)employment and health

013

HAS YOUR WORK WORKED YOU TOO HARD: AN EXAMINATION OF WORK HISTORY, PRESENT FUNCTIONAL LIMITATIONS AND REDUCED ACTIVITIES OF LIVING IN A COHORT OF THE IRISH GENERAL POPULATION

doi:10.1136/jech.2010.120956.13

V J C Mc Carthy, I J Perry, B A Greiner. Department of Epidemiology and Public Health, University College Cork, Cork, Republic of Ireland

**Objective** In the present paper, we examine the association between manual work, resultant functional limitations and reduced ability to carry out daily activities of living (ADL), in older age. We hypothesise that manual workers as opposed to non-manual workers suffer, in older age, functional limitations and reduced ability to carry out ADL. This study is of great importance owing to our ageing Irish population and an ailing health service.

**Methods** A 10 year follow up study was conducted on a cohort of the general population (59–80 year olds) in the Republic of Ireland. Specific data on physical measurements, marital status, educational attainment, work history, functional status and ADL was collected on 357 study participants. Work history data focused on the job the participant had done for the longest period of time, paid or unpaid. Each participant was then asked if they described this work as manual or non-manual. Functional limitations and ADL were assessed using validated scales.

**Results** Just over half the sample were female (53%) with 44% (n=150) retired (median=9 (5.14) years). Over 60% of the participants were, or had been engaged in manual work with this percentage higher in males, albeit non-significant (68% vs 58%, p=0.08). 20% of the total sample had complete function with a higher proportion of non-manual as opposed to manual workers (p=0.07) with no limitations. Almost three quarters of the sample had functional limitations and less than one fifth were classified as having an ADL disability.

Using linear regression, manual workers were significantly more likely to have functional limitations even after adjustment (B=0.85, SE=0.30, p=0.01) for socio-demographic factors. When stratified by age, manual work remained significantly associated with functional limitations in the 60–69 year olds (B=0.66, SE=0.34, p=0.05) and in the 70–80 year olds (B=1.13, SE=0.50, p=0.03). For the older age group, males had a decreased risk of functional limitations independent of work type (B=-1.06, SE=0.47, p=0.03).

There was no significant association between manual work and reduced activities of daily living either in the unadjusted or adjusted model.

**Discussion** Functional limitations, in an older population, are related to the type of work they carried out. Good health surveillance for manual workers at a young age can identify limitations early. Initiatives such as work organisation, education and promotion of best work practices with regard to manual work can reduce functional limitations in older age.

014

## HOW DO MUSCULOSKELETAL PAIN, AVOIDANT COPING AND SICKNESS ABSENCE RELATE TO EACH OTHER?

doi:10.1136/jech.2010.120956.14

U Christensen, C Ørsted Hougaard, K Thielen, E Nygaard, R Lund. *Department of Public Health, Section of Social Medicine, University of Copenhagen* 

**Background** Musculoskeletal pain is common and causes extensive sickness absence and work disability in many industrialised countries. The prevalence of musculoskeletal morbidity increases by decreasing socio-economic position and it appears that people with a disadvantaged social situation are more vulnerable to the