

of these associations needs to be elucidated and further research is necessary to assess whether other measures of physical capability, including chair rises and balance, have similar predictive value.

Ageing

069 THE IMPACT OF CATARACT SURGERY ON HEALTH RELATED QUALITY OF LIFE AND TIME USE IN KENYA, BANGLADESH AND THE PHILIPPINES

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Objective: To explore the impact of cataract surgery on health related quality of life (HRQoL) and time-use among adults aged ≥ 50 years Kenya, The Philippines and Bangladesh.

Methods: This was a multi-centre intervention study. Across the three countries at baseline, 651 population-based cases aged ≥ 50 years visually impaired from cataract (visual acuity in the better eye $< 6/24$), and 561 age-gender-cluster-matched controls with normal vision were identified. All participants were interviewed in their homes about vision related quality of life (WHO/PBD VF20), generic HRQoL (Euroqol) and time-use. Cases were offered free/subsidised cataract surgery. Approximately one year later participants were re-interviewed using the same questionnaires. Response rate at follow up was 84% for operated cases, and 80% for controls.

Results: At baseline, cases had substantially poorer vision specific and generic HRQoL compared to controls. Cases were also spent significantly less time on productive activities (paid and non-paid work) and more time in inactivity. Approximately one year after cataract surgery, mean vision specific and generic HRQoL improved ($p < 0.001$) to the level of controls with normal vision. Effect sizes for change in VRQoL were large (> 1.0) regardless of pre-operative VA, but were larger for those who had perception of light at baseline and for people who were operated in both eyes. Poor VA outcome from surgery was a constraint to achieving optimal post-operative VRQoL. At follow-up, operated cases were more likely to undertake and spent 1–2 hours more on productive activities compared to baseline ($p < 0.001$). Time spent in “inactivity” in Kenya and Bangladesh decreased by approximately 2 hours. Frequency of reported assistance with activities was more than halved in each setting among operated cases ($p < 0.001$).

Conclusion: Using three different outcome measures, this study demonstrated positive impacts of cataract surgery on the lives of older adults in three low-income settings, which has advocacy implications for blindness prevention programs. The observed increased time spent on productive activities, reduced time in inactivity and reduced assistance has positive implications for well-being and inclusion and supports arguments of economic benefit at the household level from cataract surgery.

070 POVERTY AND BLINDNESS: AN INTERVENTION STUDY TO ASSESS THE IMPACT OF CATARACT SURGERY ON POVERTY

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Objective: To assess the association between poverty and visually impairing cataract, and the impact of cataract surgery on alleviating poverty.

Design: Multicentre intervention study.

Setting: Centres in Kenya, Bangladesh and the Philippines. Baseline assessment was in 2005–2006, with follow-up one year later.

Participants: We recruited 596 cases and 481 controls, aged ≥ 50 years. Cases had visual acuity (VA) $\leq 3/36$ in the better eye due to cataract. Controls were age-sex-community-matched to cases with normal vision (VA $\geq 6/18$). Controls and most cases (65%) were recruited through population-based surveys, with additional cases (35%) identified through population case finding. 413 cases underwent cataract surgery. At follow-up, we re-interviewed 345 operated cases and 552 controls.

Interventions: Cataract surgery was offered to cases.

Main outcome measures: Poverty was measured through: (1) per capita household expenditure (PCE), (2) household assets and (3) household self-rated wealth.

Results: At baseline, operated cases were significantly more likely than controls to be in the lowest quartile of PCE in Kenya (OR 3.5, 95% CI 1.1 to 11.2), Bangladesh (3.0, 1.5 to 6.1) and the Philippines (4.4, 1.9 to 10.3), with a significant dose-response relationship across quartiles of PCE. The pattern was similar for assets and self-rated wealth. At follow-up, PCE had increased significantly among the operated cases in all countries, but not among the controls. Operated cases were no longer more likely than controls to be in the lowest category of PCE in Kenya and the Philippines, and the association in Bangladesh was weakened (2.0, 1.0 to 4.0). Operated cases remained poorer than controls in terms of assets and self rated wealth, although the association was weaker than at baseline.

Conclusion: The Cataract Impact Study provides evidence that cases with cataract are poorer than controls, and that operating on the cataract may help to alleviate poverty.

071 THE ASSOCIATION BETWEEN PSYCHOSOCIAL STATUS AND MORTALITY IN OLDER ADULTS: EVIDENCE FROM THE ENGLISH LONGITUDINAL STUDY OF AGEING

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Objectives: To evaluate the effect of psychosocial status on mortality risk among non-institutionalised older adults in England, controlling for selected demographic, health and lifestyle factors.

Participants: Cohort of 11 392 participants born on or before 29 February 1952 who responded to Wave 1 of the English Longitudinal Study of Ageing (ELSA), collected in 2002, and who participated in the Health Survey for England (HSE) survey in years 1998, 1999, or 2001.

Methods: The following three measures of psychosocial health, which were assessed at Wave 1, were included in the analysis: CASP-19, a measure of quality of life in early old age; the 12 item General Health Questionnaire (GHQ-12); and the Center for Epidemiologic Studies Depression Scale (CES-D). The number of negative statements agreed with or positive statements disagreed with were totalled separately for each of the three measures, resulting in scores in the range 0 to 19 for CASP-19, 0 to 12 for GHQ-12, and 0 to 8 for CES-D. Mortality status up to December 2006, as reported by ELSA in the Index file, was obtained from the Office for National Statistics. Logistic regression modelling was performed separately for each of the three measures, controlling for the following variables assessed at Wave 1: age, sex, marital status, highest educational qualification, smoking status, alcohol consumption, and self reported long-standing illness, disability and infirmity. The analysis was then replicated with a latent construct measured by CASP-19, GHQ-12, and CES-D.

Results: A total of 703 participants had died up to December 2006. The mean scores for participants who were identified as alive

compared with participants who had died, for the three psychosocial measures, were: CASP-19 (3.75 and 6.02 respectively, $p<0.001$); GHQ-12 (1.24 and 2.12 respectively, $p<0.001$); and CES-D (1.53 and 2.44 respectively, $p<0.001$). Logistic regression analyses revealed that, after controlling for demographic, health, and lifestyle factors, CASP-19 (odds ratio (OR) = 1.10, 95% CI 1.07 to 1.13), GHQ-12 (OR 1.09, 95% CI 1.05 to 1.12), and CES-D (OR 1.13, 95% CI 1.09 to 1.18) all remained significant predictors of death by December 2006. Similar results were obtained using the latent construct.

Conclusion: ELSA offers a unique opportunity to investigate how demographic, health and lifestyle factors influence the ageing process within England. This analysis has established that there is an association between mood and mortality in older adults and suggests that an intervention trial mediating mood is worthwhile.

072 HEALTH AND DISEASE IN A UK COHORT OF 85-YEAR-OLDS: THE NEWCASTLE 85+ STUDY

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Background: Worldwide, the oldest old are the fastest growing section of the population yet there is little up-to-date information about their health or factors which maintain health and independence. The Newcastle 85+ Study is exploring the spectrum of health within an inception cohort of 85 year-olds and examining health trajectories and outcomes as the cohort ages. Health status at baseline will be presented.

Methods: Members of the 1921 birth cohort were recruited from general practices in Newcastle and North Tyneside, UK during 2006–7. Participation entailed a detailed multi-dimensional health assessment (questionnaires, measurements and fasting blood sample), conducted in the home by a research nurse, together with review of general practice medical records. Undiagnosed disease was estimated by comparing assessment findings with the presence or absence of a recorded diagnosis in the general practice records.

Findings: Of the 1409 individuals contacted, 73.9% (1041) were recruited; 60.3% (850) to “face-to-face” assessment plus review of general practice records, 13.3% (188) to review of general practice records only and 0.2% (3) to “face-to-face” assessment only. Of the 853 assessed, 62.1% were female and 10.4% were living in institutional care. Socio-demographically, the sample was broadly representative of 85-year-olds in Newcastle and North Tyneside and, apart from ethnic diversity, in England and Wales. The most prevalent diseases were hypertension (57.5%) and osteoarthritis (51.8%). With regard to undiagnosed disease, 81.5% of those with a GDS-15 score suggestive of severe depression had not consulted their GP with depression in the previous year; 53.3% of those classified as moderately or severely cognitively impaired did not have a diagnosis of dementia and 27.5% of those with recorded atrial fibrillation were unknown to the GP. A quarter of those without a diagnosis of hypertension had a measured blood pressure in the hypertensive range. Sixty percent reported hearing impairment and over a third visual impairment; 38.3% reported at least one fall in the previous year; a quarter reported severe or profound urinary incontinence and 8.6% faecal incontinence. Almost a fifth were fully independent in all 17 activities of daily living and over three-quarters rated their health, compared to others of the same age, as good, very good or excellent with only 3.5% rating it as poor.

Interpretation: The results revealed good overall levels of function and self-rated health in spite of high levels of disease and impairment. Depression, dementia, atrial fibrillation and hypertension appeared to be significantly under-diagnosed.

Parallel session D

Inequalities II

073 CONTEXT OR COMPOSITION? EXPLORING THE ADULT HEALTH AND WELL-BEING OF BRITISH CHILDREN BORN IN DIFFERENT REGIONS

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Background and Aim: The aim of the research is to explore how multiple social and *spatial* disadvantage at birth and in early childhood may combine to affect health and well-being in adulthood at age 30 using the British Cohort Study (BCS70). Traditionally researchers examining the geography of poverty or disadvantage have bridged only two disciplines: sociology and geography, or have focused on single outcomes such as mortality or morbidity rates (Dorling, 1997; Tunstall *et al*, 2007). However this research takes a deeper view of “context”, based on Bronfenbrenner’s *ecological systems theory*, where the development of a child depends on the interaction of complex *layers* in their environment (physical, familial, peers, neighbourhood, wider society). This research therefore crosses several disciplinary boundaries by utilising indicators of early health, cognitive ability and behaviour in the modelling process as well as socioeconomic ones. Some of the variables explored include: birth trauma, breastfeeding, maternal “malaise”, antisocial/hyperactive behaviour at age 5, an index of early adverse events and child health problems.

Adult Outcomes: Three adult outcomes at age 29–30 were modelled taking into account individual/household socioeconomic and spatial variables. These are 1. Satisfaction with Life so far; 2. Self-reported health; 3. Presence of a limiting long-term illness.

Method: Multilevel Modelling: Data were nested by region and the social rating of the neighbourhood at the higher levels and household/individual characteristics at birth and age 5 at the lower level. Spatial level variables such as *regional* poverty rates at the relevant time (1975) were also included in the models. Multilevel logistic regression and multinomial category response models with MCMC estimation were used to fit the data using MLwiN.

Results: The presence of a *limiting long-term illness* in adulthood was found to be associated with being female, and low birthweight (linked to socioeconomic position at birth, maternal smoking during pregnancy). The association between low birthweight and having more health problems in childhood was significant. Interaction was found among maternal mental state, living in a poor neighbourhood and child antisocial behaviour. *Lower life satisfaction* in adulthood was found to be linked to the presence of a congenital abnormality and (socioeconomic position, smoking and) low birthweight, antisocial behaviour in: boys and children from large families, and being poor in a poor neighbourhood. There were interactions between socioeconomic position, cognitive ability and birthweight across the subgroups. Further investigation of *Self-reported health* at 30 is currently underway.

074 COMPARISON OF LIFE COURSE SOCIOECONOMIC MODELS FOR CARDIOVASCULAR RISK FACTORS: 1946 BIRTH COHORT

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Background: Different approaches have been used to test life course models of socioeconomic position (SEP) in relation to cardiovascular disease (CVD) but have generally only tested one model.