

Friday 16 September 2011

Parallel Session D

Birth cohort and lifecourse

OP66

CLINICAL PROBLEMS IN A POST WAR BRITISH COHORT REACHING RETIREMENT: EVIDENCE FROM THE FIRST BRITISH BIRTH COHORT STUDY

MB Pierce,¹ R Silverwood,² R Hardy,¹ J Adams,³ S Black,¹ J Deanfield,⁴ JA Franklyn,⁵ M Richards,¹ M Stafford,¹ AM Stephens,⁶ P MacFarlane,⁷ D Nitsch,² K Ong,¹ D Kuh,¹ NSHD Scientific and data collection teams¹ ¹MRC Unit for Lifelong Health and Ageing, University College London, London, UK; ²Non-communicable Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, UK; ³Clinical Radiology, Manchester Royal Infirmary, Manchester, UK; ⁴Vascular Physiology Unit, Institute of Child Health, London, UK; ⁵School of Clinical and Experimental Medicine, University of Birmingham, Birmingham, UK; ⁶MRC Human Nutrition Research, University of Cambridge, Cambridge, UK; ⁷Institute of Cardiovascular and Medical Sciences, University of Glasgow, Glasgow, UK

10.1136/jech.2011.143586.66

Introduction The health of the post war 'baby boomers' will dominate the health and social care systems for decades to come. We know little about the prevalence of clinical problems in these postwar birth cohorts.

Objectives To describe the prevalence of significant clinical problems at 60–64 years in the Medical Research Council (MRC) National Survey of Health and Development; to examine whether these problems cluster in the same individuals and the extent of undiagnosed disease.

Design setting and participants Between 60–64 years, participants in a national British birth cohort study completed postal questionnaires (2467/2866) and, by March 2011, 2243/2767 had either visited one of six UK clinical research facilities (n=1700) or had been visited by the research nurse at home (n=543). Participants underwent a physical examination and fasting blood and urine samples were collected. Self reported problems were compared with clinical problems revealed by blood and urine tests, electrocardiogram (ECG) results, Bone Density Scan (DXA), and General Practitioner (GP) and hospital records.

Outcome measures The proportion with cardiovascular diseases (CVD eg, hypertension, myocardial infarction, stroke, arrhythmia), endocrine diseases (diabetes, thyroid disease), kidney disease, impaired liver function, and reduced bone mineral density (BMD; osteoporosis and osteopenia as defined by the World Health Organisation).

Results Preliminary results based on about 60% of the sample show a high prevalence of CVD risk (46% hypertension, 36% raised cholesterol) and although only 2% had arrhythmia and 2% had already had a myocardial infarct, 14% had been in hospital for CVD investigative tests in the last 10 years. In endocrine disease, 9% have diabetes, 15% impaired fasting glucose, 2% have overt thyroid dysfunction and 9% any thyroid dysfunction. Around 4% have estimated glomerular filtration rate < 60 ml/min/1.73 m² and 28% impaired liver function (γ -glutamyl transferase (GGT) ≥ 51 IU/l (men) and ≥ 33 IU/l (women). In regards to bone health, 13% have osteoporosis (T score ≤ -2.5) and 59% osteopenia (T score ≤ -1.0). With data on the full sample (June 2011), we will assess how nationally representative this sample remains, define the level of undiagnosed disease, and identify individuals who have several of these clinical problems and those who have none, and relate these to lifetime risk factor burden.

Conclusion This cohort of the first of the UK baby boomers, studied just at statutory retirement age, has many medical problems, which will pose a considerable load on health and social services in the coming years, particularly in this time of economic restraint.