

## P76 THE DETERMINANTS OF SUBJECTIVE WELLBEING: AN ANALYSIS OF A HEALTH AND WELLBEING SURVEY IN SOUTHEAST ENGLAND

<sup>1</sup>AM Lagnado\*, <sup>2</sup>K Gilchrist, <sup>3</sup>A Memon. <sup>1</sup>Undergraduate Medical School, Brighton and Sussex Medical School, Brighton, UK; <sup>2</sup>Directorate of Public Health, Brighton and Hove City Council, Brighton, UK; <sup>3</sup>Epidemiology and Public Health Medicine, Brighton and Sussex Medical School, Brighton, UK

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**Background** The concept of wellbeing is now increasingly used as one of the key measures of societal progress, along with the traditional methods that are based on economic activity. Subjective wellbeing (SWB) is a construct by which national wellbeing can be measured—this can inform development of health and social policy. The objective of this study was to determine the association between sociodemographic/personal factors and low subjective wellbeing.

**Methods** Data from the health and wellbeing survey conducted in Brighton and Hove in 2012 (n=2,035) was analysed. The survey included the Office of National Statistics verified measure of SWB, which consisted of four questions regarding life satisfaction, fulfilment, happiness and anxiety. Low SWB was the outcome measure, the threshold of which was determined according to the Faculty of Public Health outcome framework. The survey also included a range of population measures, sixteen of which were chosen as explanatory variables. The analysis included descriptive statistics and multivariate logistic regression, using the SPSS statistical programme.

**Results** In the multivariate analysis, poor general health (self-reported) was strongly associated with low SWB [dissatisfaction with life (adjusted OR=3.9, 95% CI, 2.7–5.6); unfulfilled (3.4, 2.3–4.8); unhappiness (3.0, 2.1–4.2); anxiety (2.4, 1.7–3.3)]. Other factors found to be significantly associated with low SWB included: illness and disability, low social capital, lack of physical exercise, a history of self-harm, not owning a home, not being in a relationship and being middle aged. On the other hand, unemployment, deprivation and poor education were not associated with SWB.

**Conclusion** This study demonstrates that an individuals SWB is likely to be affected by a number of sociodemographic/personal factors. The limitations of this study include the extent of external validity, the lack of causality and potential selection and information bias. These findings are relevant to the design and delivery of policy aimed at improving the perception of wellbeing in individuals, and the general population.

## P77 LEVELS OF PSYCHOLOGICAL DISTRESS AND PREDICTORS OF DISTRESS IN FAMILY CARERS OF PATIENTS WITH CANCER AT END OF LIFE

<sup>1</sup>GE Grande\*, <sup>1</sup>C Rowland, <sup>2</sup>B van den Berg, <sup>3</sup>E Batistatou, <sup>4</sup>B Hanratty. <sup>1</sup>Division of Nursing, Midwifery and Social Care, University of Manchester, Manchester, UK; <sup>2</sup>Faculty of Economics and Business, University of Groningen, Groningen, Netherlands; <sup>3</sup>Institution of Population Health, University of Manchester, Manchester, UK; <sup>4</sup>Institute of Health and Society, Newcastle University, Newcastle, UK

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**Background** Family carers provide substantial support for patients at end-of-life. It is important to understand how caregiving impacts on carers to guide appropriate interventions to improve carer wellbeing.

The aims of this study were to investigate levels of psychological distress and predictors of distress during end of life care giving in a national sample of family carers of people with cancer.

**Methods** Four-month post-bereavement postal survey of a national census sample of relatives reporting a death from cancer 1–16th May 2015. Retrospective data collected included carer demographics, carers' psychological distress (GHQ-12), care giving hours and tasks, out of pocket expenses, support from informal and formal care, other demands on carers' time (work, other caregiving responsibilities, voluntary work), opportunities for respite, patient symptoms and activities of daily living (ADL). Exploratory univariate analyses were used to describe the data and inform multivariate analysis.

**Results** Surveys were completed by 1504 (28.5%) of 5271 carers. Carers' median GHQ distress score was 7 (IQR 4–9), where a score ≥4 indicates 'caseness' for psychological distress. Univariate analysis results at p<0.05 indicate that increased hours of caregiving, other caring responsibilities and the patient's worsening symptoms and reduced ADL increased distress. Formal support, hours of volunteering and respite were associated with reduced distress. Carer age, sex, work situation and level of deprivation also related to distress. Multivariate analysis indicates that the total hours of care giving, patients' psychological symptoms and the carer being female was related to increased distress, whilst formal service provision was related to reduced distress. The final model explained 19% of variance in distress.

**Conclusion** A considerable majority of family carers suffer clinically significant levels of psychological distress during end of life care giving. Objective care burden in the form of total hours of caregiving is associated with increased distress. Being female and caring for a patient with psychological symptoms appears to increase distress, whereas support from formal care services can ameliorate distress. Whilst the final model explains a modest amount of variance in carer distress, it indicates that reduction in objective care burden and support from services can have an important, positive impact.

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## P78 MEASURING MATERNAL MOOD

<sup>1</sup>E Savage-McGlynn\*, <sup>1</sup>M Redshaw, <sup>2</sup>C Martin. <sup>1</sup>National Perinatal Epidemiology Unit, University of Oxford, Oxford, UK; <sup>2</sup>Faculty of Society and Health, Buckinghamshire New University, Uxbridge, UK

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**Background** Mood disorders are common among women during the perinatal period, impacting their well-being and that of their families. Prevalence estimates range from 8 to upwards of 40%. Variable detection of cases has been attributed to different measures used, timing of assessment, women not disclosing their feelings, and health professionals not asking questions in meaningful ways. Different measures have been used along the maternity care pathway, with varying reliability and specificity to detect cases and commonly employ graded multiple response format.

Listening to what women say about completing such measures, there is a clear need to develop alternative methods of assessing maternal mood in the perinatal period.

**Objective** To develop a measure of maternal mood that provides novel answering and scoring formats, accounts for the spectrum of emotions and symptoms experienced by women in the perinatal period, and correlates with clinical diagnostic measures.

**Methods** A literature review was conducted to assess current understanding of diagnostic criteria for perinatal mental health conditions. Based on previous research with adjective checklists and women's free text responses to national maternity surveys in 2010 and 2014, scoping of the measure was undertaken. A list of 24 adjectives (12 positive items, 12 negative items) was determined for a prototype measure in which women could choose the adjectives to describe how they had been feeling in the last seven days. Cognitive interviews were conducted with 12 women who had recently given birth, and positive feedback endorsed the content, verified item selection and face validity of the scale.

**Results** The checklist was administered in a survey of maternal and child health to which 551 new mothers responded. Exploratory and Confirmatory factor analyses were conducted to explore underlying factor structure. Two models resulted: a two-factor solution (1. positive mood, 2. negative mood) and a four-factor solution: (1. positive mood, 2. negative mood, agitation; 3. anhedonia, low energy; 4. positive life orientation). Analyses were undertaken for validation and to explore associations with other screening measures to support its use.

**Conclusion** This novel method of reporting feelings and mood in an engaging format will facilitate research in the perinatal field and allow more opportunities for conversations about mood and mental health with health care professionals. As a tool that is psychometrically robust, time-efficient, and which may afford greater insight on the emotional state of the women cared for, the perinatal mood checklist is an effective addition to measures currently available.

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# VALIDATION OF TWO SECONDARY SOURCES OF FOOD ENVIRONMENT DATA AGAINST STREET AUDITS IN ENGLAND

<sup>1</sup>E Wilkins\*, <sup>2</sup>M Morris, <sup>1</sup>D Radley, <sup>1</sup>C Griffiths. <sup>1</sup>Carnegie, Leeds Beckett University, Leeds, UK; <sup>2</sup>Leeds Institute for Data Analytics, School of Medicine, University of Leeds, Leeds, UK

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**Background** Public Health England recently published a tool to help local authorities monitor the density of fast food outlets, with restrictions on access to these 'unhealthy' outlets being promoted in the fight against obesity. Secondary data containing the locations of food outlets present valuable resources to guide and evaluate these interventions. However, evidence appraising these data sources is limited. This study therefore seeks to validate two sources of secondary food environment data (SFED): Ordnance Survey Points of Interest (POI) data and food hygiene data from the Food Standards Agency (FSA), against street audits. These data sources are commonly used in research, with the former also being used in the Public Health England tool.

**Methods** Audits were conducted across 54 Lower Super Output Areas in England. All streets within each Lower Super Output Area were covered to identify the name and street address of all food outlets therein. Audit identified outlets were matched to outlets in the SFED to identify true positives (TP: outlets in both the SFED and the audits), false positives

(FP: outlets in the SFED only) and false negatives (FN: outlets in the audits only). Agreement was assessed using positive predictive values (PPV: TP/(TP +FP)) and sensitivities (TP/(TP +FN)). Confidence intervals were calculated in Excel using the Agresti-Coull method.

**Results** Overall, the street audits identified 1188 food outlets, compared to 1102 and 1098 for the POI and FSA data respectively. Sensitivity and PPV were significantly higher for FSA data (sensitivity: 0.80, CI: 0.77–0.82; PPV: 0.86, CI: 0.84–0.88) than for the POI data (sensitivity: 0.73, CI: 0.71–0.76; PPV: 0.79, CI: 0.77–0.81). Both datasets had 'good' agreement with street audits according to the Paquet classifications ('good' defined as PPV and sensitivities between 0.71 and 0.90).

**Conclusion** This study provides new evidence for the validity of SFED commonly used in research and emergently used by policymakers. Agreement between the SFED and street audits is sufficiently good to provide local authorities with confidence in using tools and research based on these SFED. Whilst FSA data has statistically significantly higher agreement with street audits than POI, the magnitude of the difference is relatively small. POI also has other advantages (e.g. more detailed outlet classifications and better spatial accuracy). Thus, POI is still a useful and recommended source of food environment data.

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# DOES SELF-RATED HEALTH MEASURE THE SAME CONCEPT ACROSS COUNTRIES? INSIGHTS FROM A COMPARISON OF OLDER ADULTS IN ENGLAND AND JAPAN

<sup>1</sup>BD Williams\*, <sup>1</sup>T Chandola, <sup>2</sup>N Cable. <sup>1</sup>Cathie Marsh Institute for Social Research, University of Manchester, Manchester, UK; <sup>2</sup>Institute of Epidemiology and Health Care, University College London, London, UK

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**Background** Self-Rated Health (SRH) is predictive of morbidity and mortality, correlates well with objective measurements of physical function and is simple to use in multidisciplinary surveys. It could be a useful way of comparing health policies in different countries. However, it may not be comparable between countries which may wish to contrast health policies, for example Britain and Japan, because of linguistic, cultural or health differences. We aimed to test for differences in the association between SRH and physical function (grip strength), mental health (depression) and cardiovascular risk (smoking and BMI) between older adults in Japan and England.

**Methods** Data were used from the English Longitudinal Study of Ageing (ELSA; 2004, 2008 and 2012) and the Japanese Study of Ageing and Retirement (JSTAR; 2007, 2009 and 2011), giving n=10, 174 ELSA participants and n=4279 JSTAR participants, all aged 50 and above. Multilevel binary logistic regression was used to test whether participants' country of residence was associated with odds of fair or poor SRH and whether the country of residence would moderate associations between SRH and grip strength, depression, smoking or BMI.

**Results** Japanese women (15.6%) and men (14.1%) were less likely to report fair/poor SRH than English women (23.6%) and men (24.1%). After adjusting for covariates these differences remained for men (Odds Ratio [OR] for Japanese men 0.64, 95% CI 0.74–0.85) but not for women (OR for Japanese women 1.02, 95% CI 0.47–1.34). Grip strength (OR's