

OP12

### THE IMPACT OF PARTICIPANT-LED 'ASSETS' DURING ADOLESCENCE OF EARLY ADULT HEALTH AND WELL-BEING IN THE UK: LONGITUDINAL ANALYSIS AND WELL-BEING TRAJECTORIES USING THE 'NEXT STEPS' DATASET

<sup>1</sup>JA McGowan\*, <sup>2</sup>A Hagell, <sup>2</sup>E Rigby, <sup>2</sup>R Shah, <sup>1</sup>M Heyes, <sup>3</sup>D Hargreaves, <sup>1</sup>R Viner. <sup>1</sup>Institute of Child Health, University College London, London, UK; <sup>2</sup>Association for Young People's Health, London, UK; <sup>3</sup>Imperial College London, London, UK

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**Background** While employment and education rates have been extensively studied, little is known about how general well-being through early-late adolescence impacts well-being into adulthood. Utilising participant-led research, we mapped the presence and trajectories of 'assets' identified by young people (YP) as important during their adolescence to 'success' in early adulthood.

**Methods** YP identified four 'assets': 'appropriate skills', 'social capital', 'financial support' and 'emotional support', which were mapped across early (T1: age 13–15), mid (T2: 16–17), and late (T3: 18–20) adolescence. Four adult (age 25–26) outcomes were also identified: 'suitable/rewarding work', 'satisfactory housing', 'good relationships', and 'healthy habits'. The presence of these were identified using binary measures, developed from the 'Next Steps' dataset - a yearly longitudinal study following English individuals born in 1989/1990 (N=15,770). Trajectories were categorised as an asset being 'stable high', 'stable low', 'late rising' (T3), 'early rising' (T2), 'late falling', 'early falling', and 'unstable'.

**Results** A complete case analysis was performed. Data was weighted using the standard LSYPE weightings. Assets were reported by 90% (emotional support) – 20% (confidence and connections) of young people, and generally decreased in prevalence over adolescence ( $ps < 0.001$ ). At age 25, just over half of YP reported 'satisfactory housing' (53.8%, SE=0.8) or 'suitable/rewarding work' (59.9%, SE=0.7). The majority reported 'good relationships' (87.7%, SE=0.5) and 'healthy habits' (74.3%, SE=0.6).

Using regression analyses adjusted for sex and ethnicity, we identified that attaining 'suitable/rewarding work' at age 25/26 was associated with the presence of 'skills' (T1:Coef=1.36, 95% CI=1.18–1.58; T2:Coef=1.30, 95% CI=1.13–1.49); T3: Coef=1.29, 95%CI=1.10–1.51,  $ps < 0.001$ ) and 'financial support' (T1:Coef=1.21, 95% CI=1.04–1.41, T2:Coef=1.27, 95% CI=1.05–1.52; T3:Coef=1.21, 95% CI=1.05–1.39;  $ps = 0.01$ ) at all adolescent age-bands, and 'confidence and connections' at ages 16–20. 'Satisfactory housing' was associated with skills, confidence & connections, and financial support at all time-points. 'Good relationships' was associated with all assets, except financial support at T3. 'Healthy habits' was not consistently related to any asset. Regardless of outcome, the benefits of the asset trajectories remained the same: compared to 'stable low' trajectories, 'stable high' trajectories showed the largest benefit across all assets. For 'skills', any trajectory other than 'stable low' had a statistically significant positive adult outcome ( $ps < 0.002$ ). For 'confidence and connections' and 'financial support', 'early rising', 'stable high', and 'late falling' were consistently related with a positive outcome ( $ps < 0.01$  and  $< 0.03$ ).

**Conclusion** The assets available to adolescents impact their young adult outcomes across distinct pathways, but not all assets are commonly available to YP. The stability of these assets across adolescence is of particular importance to adult outcomes, as is their presence in early-mid adolescence.

OP13

### MORTALITY RISK AMONGST VERY LOW BIRTH WEIGHT INFANTS BORN IN THE REPUBLIC OF IRELAND

<sup>1</sup>P Corcoran\*, <sup>1</sup>S Leita, <sup>2</sup>A Twomey, <sup>3</sup>BP Murphy. <sup>1</sup>National Perinatal Epid. Centre, NPEC; Dept. Obs and Gynae, UCC, Cork, Ireland; <sup>2</sup>Consultant Neonatologist, National Maternity Hospital, Dublin, Ireland; <sup>3</sup>Consultant Neonatologist, Cork University Maternity Hospital, South/Southwest Hospital Group, Cork, Ireland

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**Background** Globally, there are approximately six million deaths of children under 5 years of age each year, the leading cause of which is preterm birth complications. Very preterm infants are at especially high risk of mortality. The Vermont Oxford Network (VON) is a non-profit voluntary collaboration of health care professionals from nearly 1000 neonatal intensive care units around the world and it maintains a database of information regarding the care and outcomes of high-risk newborn infants.

We aimed to use the VON data to assess whether very low birth weight (VLBW) infants born in Ireland in 2014–2016 had a higher than expected risk of death.

**Methods** Since 2014, all 19 neonatal units in Ireland have contributed data to the VON database on VLBW infants, defined as an infant who is born alive and whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days (inclusive). VON colleagues use multivariable logistic regression models to quantify the risk of mortality associated with a range of infant characteristics. We used coefficients from these regression models to calculate standardised mortality ratios (SMRs).

**Results** The VON database had data on 1,812 VLBW infants born in Ireland in 2014–2016, of which 1,765 were records from their hospital of birth. The mortality risk for these 1,765 infants was 1.17 times higher than expected, a statistically significant excess mortality (95% CI: 1.05, 1.29). Infants born at 22–23 weeks had a 23% higher mortality risk (SMR=1.23, 95% CI: 1.02, 1.44) that was almost wholly due to the infants not administered resuscitation. Infants born at 24–27 weeks in a tertiary unit did not experience higher than expected mortality (SMR=1.01, 95% CI: 0.80, 1.23) but those born in non-tertiary units had a 70% higher mortality risk (SMR=1.70, 95% CI: 1.25, 2.15).

**Conclusion** These findings support the recommendations that resuscitation should be administered to all infants born at 23 weeks who present in favourable condition, i.e. without congenital anomaly, severely small for gestational age, severe hypoxia or severe infection. In line with the existing Model of Care for Neonatal Services in Ireland, infants born before reaching a gestational age of 28 weeks should ideally be delivered at a tertiary neonatal unit.

OP14

### WHAT MODERATES THE SCARRING EFFECT OF YOUTH UNEMPLOYMENT ON LATER LIFE MENTAL HEALTH?

L Wright\*, J Head, S Jivraj. *Epidemiology and Public Health, University College London, London, UK*

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**Background** Close to half a million young people are currently unemployed in the UK. Several studies show that youth unemployment is associated with worse mental health in later life. Few have looked at whether this association is limited to certain groups or is pervasive across the population. Our study

aims to assess which factors moderate the effect of youth unemployment on mental health measured in the mid-twenties.

**Methods** We use data from Next Steps (formerly the Longitudinal Study of Young People in England) a cohort of secondary school children recruited at age 14 and followed up to age 25. We measure youth unemployment as six or more months worklessness between ages 18–20 (2008–2010), a period which includes the high youth unemployment rates which followed the global financial crisis. Our measure of mental health is the 12-Item General Health Questionnaire (GHQ) Likert score collected at age 25. We use multivariate OLS regression and add interaction terms to models to assess whether the association between youth worklessness and GHQ scores differs by: gender, locus of control (measured at age 15), parental socioeconomic class (age 14), and adolescent neighbourhood characteristics.

**Results** Our sample consists of 4,047 individuals, 14.4% of whom experienced six or more months worklessness between ages 18–20. Preliminary results show youth worklessness is associated with worse GHQ scores at age 25 (beta=0.13, 95% CI=0.043–0.218), an association which is somewhat attenuated adjusting for GHQ scores at age 15 (beta=0.08, 95% CI=-0.006–0.168). Comparing across groups, a significant association is only found amongst males (beta=0.18, 95% CI=0.056–0.309) and individuals from low socioeconomic class backgrounds (beta=0.13, 95% CI=0.043–0.218). (Corresponding figures for females (beta=0.017, 95% CI=-0.103–0.137) and those from higher socioeconomic class backgrounds (beta=0.012, 95% CI=-0.098–0.122).) There is little evidence that locus of control moderates the association between youth worklessness and later mental health (F-test for difference in coefficients for above vs below median locus of control: p=0.839).

**Conclusion** These results suggest the scarring effects of youth unemployment may be confined to certain groups. Future research should examine why youth unemployment may signal future difficulties amongst some individuals and not others. Policymakers looking to improve the long-term outcomes of unemployed young people may consider focusing on particular groups.

OP15

#### A LONGITUDINAL STUDY ON THE ASSOCIATION BETWEEN PERCEIVED NEIGHBOURHOOD CONDITIONS AND DEPRESSION IN 10,487 AGING EUROPEAN ADULTS: DO THE ASSOCIATIONS VARY BY EXPOSURE TO CHILDHOOD STRESSORS?

<sup>1</sup>G Baranyi\*, <sup>2</sup>S Sieber, <sup>1</sup>J Pearce, <sup>2,3</sup>B Cheval, <sup>1</sup>C Dibben, <sup>2,4</sup>M Kliegel, <sup>2,3</sup>S Cullati. <sup>1</sup>Centre for Research on Environment, Society and Health, University of Edinburgh, Edinburgh, UK; <sup>2</sup>Swiss NCCR 'LIVES – Overcoming Vulnerability: Life Course Perspectives', University of Geneva, Geneva, Switzerland; <sup>3</sup>Department of General Internal Medicine, University of Geneva, Geneva, Switzerland; <sup>4</sup>Center for the Interdisciplinary Study of Gerontology and Vulnerability, University of Geneva, Geneva, Switzerland

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**Background** Emerging literature emphasises the association between neighbourhood conditions and late life depression. Childhood experiences, crucial for life course development of mental health, may modify how neighbourhood affects subsequent depression. This study assessed the longitudinal associations between perceived neighbourhood and depression among older adults, and tested whether these associations varied by exposure to different childhood stressors.

**Methods** Data were drawn from the cross-national SHARE Survey, a 10-year probability sampled cohort study, representative for European adults aged 50 and over. Non-institutionalised respondents were included, if they provided answers on neighbourhood and depression at baseline (waves 1 or 2), participated in the life history assessment (wave 3), and had at least one assessment of depression during the follow-up (waves 4–6). Neighbourhood was assessed with four binary questions, capturing the subjective perception of access to services (public transportation, neighbourhood amenities) and neighbourhood nuisance (crime, air pollution and environmental problems) in the area surrounding the place of residence. Childhood stressors, defined as socioeconomic conditions, adverse experiences and health problems, were derived from retrospectively collected questions. Depression was measured with the EURO-D scale; the cut-off score of  $\geq 4$  indicated clinically significant levels of depressive symptoms. Multilevel logistic regression estimated the risk of depression. We conducted sensitivity analyses by using continuous EURO-D scores in multilevel linear regression and adjusting final models for urban-rural difference. All models were conducted in R Studio.

**Results** The final sample comprised 10,487 participants with 18,899 observations during follow-up, living in 13 European countries. After controlling for sociodemographic and health covariates, as well as baseline depression, access to services were negatively (OR=0.81, 95% CI 0.71–0.93) and neighbourhood nuisance positively (OR=1.29, 95% CI 1.12–1.47) associated with depression during follow-up. We found interactions between neighbourhood and childhood socioeconomic conditions, but not with adverse experiences and health problems. While older adults who grew up in better childhood socioeconomic conditions benefited more from living in a residential area with good access to services, they were at higher risk of developing depression when residing in areas with more neighbourhood nuisances.

**Conclusion** Older adults' mental health can benefit from better access to services, while neighbourhood nuisance increase the risk of depression. Importantly, socioeconomic circumstances in early life may influence vulnerability to neighbourhood effects. Limitations, concerning self-reported measures and retrospectively collected childhood indicators warrant for cautious interpretations. Future research on neighbourhood effects should prioritise the implementation of the life course approach, while policy should consider neighbourhood as a public health opportunity supporting healthy ageing.

## Cardiovascular Disease

OP16

#### ASSOCIATIONS OF CHOLESTEROL TARGETS AND MORTALITY WITH STATIN ADHERENCE IN NHS GREATER GLASGOW & CLYDE'S POST MYOCARDIAL INFARCTION POPULATION

<sup>1</sup>R Brown\*, <sup>2</sup>S Wild, <sup>3</sup>J Lewsey, <sup>1</sup>P Welsh, <sup>1</sup>J Logue. <sup>1</sup>Institute of Cardiovascular and Medical Science, University of Glasgow, Glasgow, UK; <sup>2</sup>Usher Institute of Population Health Sciences and Informatics, University of Edinburgh, Edinburgh, UK; <sup>3</sup>Institute of Health and Wellbeing, University of Glasgow, Glasgow, UK

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**Background** Under SIGN cardiovascular disease guidelines (2007, 2017), patients >40 years in Scotland are classified as being at high or low risk of a CVD event in the next ten