during adolescence and therefore less tied to socioeconomic position. Many participants saw the individualised concept of 'drive to succeed' as pivotal for the transition to adulthood, claiming the possessing this quality made it possible to achieve in education or employment regardless of upbringing or structural factors. The study highlighted class stigma, with some young people from low socioeconomic backgrounds avoiding health risk behaviours such as tobacco smoking or hazardous alcohol consumption as a strategy to evade further stigmatisation.

Conclusion While individual agency was highlighted by many participants, family support was recognised as essential for navigating adolescence in relation to health behaviours and socioeconomic life trajectories. Class stigma related to health risk behaviours was either experienced or witnessed by young people throughout their adolescence. Therefore, while quantitative data suggest that youth from low SES backgrounds engage in more health risk behaviours, public health interventions should adopt measures to avoid further stigmatising these young people.

OP50 **ABSTRACT WITHDRAWN**

Thursday 10 September

Non-Communicable Disease: Risk Factors

OP51 PREDICTORS OF CARDIOVASCULAR DISEASE IN WOMEN WITH HYPERTENSIVE DISORDERS OF PREGNANCY

[1]ZP Pasdar*, [1]DTG Gamble, [1]PKM Myint, [2]SB Bhattacharya. *[1]Ageing Clinical and Experimental Research (ACER) Team, University of Aberdeen, Aberdeen, UK; [2]Obstetrics and Gynaecology, Aberdeen Centre for Women's Health Research, University of Aberdeen, Aberdeen, UK*

10.1136/jech-2020-SSMabstracts.50

Background Whilst international guidelines recognise hypertensive disorders of pregnancy (HDP) as a major risk factor for premature cardiovascular disease (CVD) in women, there is a paucity of recommendations for how to identify those with such high risk. We aimed to determine the predictors of CVD in women with a history of HDP.

Methods Eligible women were identified from the Aberdeen Study of Cardiovascular Health in Women (ASCHW) and European Prospective Investigation into Cancer (EPIC)-Norfolk prospective cohorts and they were followed for incident CVD events through record linkage using ICD 9/10 in both cohorts. Of 4,186 women with a history of HDP identified, 3,468 attended clinic assessment. Missing data were handled using multiple imputation. We examined the relationship between HDP and incident cardiovascular events by carrying out three separate univariate and multivariable logistic regression analyses: lifestyle questionnaire variable analysis, analysis including examination variables and plasma cardiovascular biomarker analysis. The final model consisted of statistically significant predictors (p-value<0.05) derived from the three analyses. Validity of the model was assessed by discrimination (c-statistic) and calibration (Hosmer-and-Lemeshow test).

Results Selected predictors for CVD in women with HDP in the final model were age over 49 years, no university education, high BMI, total cholesterol, triglyceride and plasma fibrinogen; usage of aspirin and lipid lowering medications; hypertension, family history of heart disease, repeated HDP exposure, and the cohort population. All predictors in the final model were statistically significant except total cholesterol levels. The risk factors which conferred the greatest odds ratios of CVD (≥2-fold odds) were: age beyond 49 years (1.99; 95% CI 1.57–2.54), hypertension (2.84; 95% CI 2.36–3.41), aspirin users (2.18; 95% CI 1.54–3.08), having morbidly obese BMI (2.16; 95% CI 1.54–3.04) and the EPIC-Norfolk population (12.57; 95% CI 9.85–16.04). Median AUC was 0.82 and calibration ranged from <0.001 to 0.003 in imputed datasets.

Conclusion We have identified significant predictors of CVD in women with a history of HDP. This suggests that women with a history of HDP should be followed up from the age of 49 years. Biomarkers such as triglyceride and fibrinogen should be monitored, particularly if women have hypertension, high BMI, a family history of CVD or have had repeated exposure to HDP. Further external validation work is recommended to confirm the clinical utility of the proposed predictors of CVD.

OP52 ASSOCIATION BETWEEN CARDIOVASCULAR HEALTH AND STROKE IN OLDER BRITISH MEN: FINDINGS FROM THE BRITISH REGIONAL HEART STUDY

[1]A Ahmed*, [2]SM Pinto Pereira, [1]O Papacosta, [1]LT Lennon, [3]P Whincup, [1]SG Wannamethee. *[1]Primary Care and Population Health, University College London, London, UK; [2]Epidemiology and Public Health, University College London, London, UK; [3]Population Health Research Institute, St George's University of London, London, UK*

10.1136/jech-2020-SSMabstracts.51

Background The American Heart Association's model of ideal cardiovascular health (CVH), based on 7 well-known and modifiable health factors (body mass index, blood pressure (BP), glucose, cholesterol, physical activity, smoking and diet - Life's Simple 7 or LS7) was developed to promote primordial prevention of cardiovascular disease (CVD), including stroke. Stroke burden rises sharply with age. However most research exploring CVH has been conducted in middle-aged participants. In the British Regional Heart Study (BRHS), we prospectively explored associations of each LS7 factor and composite CVH scores with stroke in middle and older age; and associations between CVH trajectories and stroke incidence in later life.

Methods The BRHS is a prospective study of men recruited in 1978–1980 (aged 40–59y, baseline) and followed up for CVD events. The men were re-examined at 20 years (Q20). All components of LS7 were measured at both time points except baseline diet. Men without pre-existing CVD were followed from baseline (mean age 50y, n=6612) and again from Q20 (mean age 69y, n=3798) for a median period of 20y and 16y respectively. Cox models estimated risk of stroke as adjusted hazard ratios (HRs) for ideal and intermediate vs poor levels of LS7 factors; for composite CVH scores; and for 4 CVH trajectory groups based on transitions in CVH status (low/high) from baseline to Q20 - Low-Low, Low-High, High-Low and High-High.

J Epidemiol Community Health: first published as 10.1136/jech-2020-SSMabstracts.50 on 24 August 2020. Downloaded from http://jech.bmj.com/ on April 20, 2024 by guest. Protected by copyright.