Titles and abstracts of identified records were assessed independently by two reviewers. Full texts of all potentially relevant papers were retrieved. Two reviewers assessed each full text and reasons for exclusion were recorded. Differences in opinions were resolved by a third reviewer.

Methodological quality was assessed by two reviewers independently as low, medium or high in terms of trustworthiness and reliability of findings. This was done using criteria developed by the EPPI-Centre. Full texts will be opened in NVivo and analysed using thematic synthesis, as described by Thomas and Harden (2008). The certainty of review findings will be assessed using the Confidence in the Evidence from Reviews of Qualitative Research (CERQual) approach.

Results 19 230 records were identified for title and abstract screening. 284 full-texts were screened, with 30 included in the final sample.

Conclusion This review is due for completion in June 2017. Findings will inform development of an adolescent weight management intervention in Coventry, West Midlands.

To date, no systematic review has focused on adolescent views of weight management interventions. The views of adolescents should be taken as a starting point when planning future initiatives.

P94 | ASSOCIATIONS BETWEEN MATERNAL PREGNANCY, SOCIAL AND LIFESTYLE CHARACTERISTICS AND OFFSPRING BLOOD PRESSURE AT AGE 4/5 IN WHITE BRITISH AND PAKISTANI ORIGIN PARTICIPANTS IN THE BORN IN BRADFORD STUDY

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Background South Asians have an increased risk of stroke and coronary heart disease (CHD) compared to white European populations. High blood pressure (BP) is an important risk factor for CHD and higher diastolic BP has previously been reported in both South Asian adults and children. Our aim was to examine whether maternal pregnancy, social and lifestyle characteristics are associated with BP at age 4/5 and contribute to these differences.

Methods Born in Bradford is a prospective study of children born to 12 453 mothers between 2007 and 2010 in Bradford, UK. All mothers completed an oral glucose tolerance test in pregnancy and provided detailed social and lifestyle data. We present data from 2129 White British and 2528 Pakistani mother/offspring pairs from the Born in Bradford study. Associations of BMI, gestational diabetes (GD), fasting and post load glucose, maternal hypertension (HDP), smoking in pregnancy and maternal education with offspring systolic and diastolic BP at age 4/5 were examined. We adjusted our results for sex and age at BP measurement.

Results Pakistani children had lower systolic (mean difference −0.16 95% CI −0.79, 0.47) but higher diastolic (mean difference 1.38 95% CI 0.74, 2.03) compared to White British children. In Pakistani children maternal BMI and HDP were strongly associated with higher systolic and diastolic BP but the effect was minimal and weak in White British children. Associations of maternal glucose and BP were consistent with

the null hypothesis in both groups. Smoking and education were not associated with BP in either group.

Conclusion Ethnic differences in systolic and diastolic BP are present in children at age 4/5. Consistent with findings in adults, Pakistani origin children have on average lower systolic and higher diastolic BP compared to White British children. Maternal BMI and HDP influence BP in Pakistani children but have minimal effect in White British children. These results suggest a role for some maternal pregnancy and lifestyle exposures in ethnic differences in systolic and diastolic BP at age 4/5.

P95 | ETHNIC VARIATIONS IN CLUSTERING OF ADOLESCENT HEALTH RISK BEHAVIOURS: LATENT CLASS ANALYSIS

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Background There is evidence from existing literature of ethnic variations and clustering in adolescent health risk behaviours. However, it is not known whether there are ethnic variations in health risk behaviour clustering. We aimed to investigate ethnic variations in the clustering of health risk behaviours using the Determinants of young Adults Social wellbeing and Health study (DASH).

Methods Latent class analysis and multinomial logistic regression were used to investigate adolescent health risk behaviour clustering and ethnic variations in clustering in the MRC DASH study. Data were collected from 51 schools across 8 London boroughs. In 2005–06, 4785 pupils were followed up at 14–16 years old. Age, gender, ethnicity, substance use (SU) behaviours (current tobacco and alcohol, and lifetime illicit drug use), daily fruit and vegetables (FV), weekly physical activity (PA), and body mass index (BMI) were recorded.

Results A model with four latent classes was selected (entropy: 0.757). Classes could be characterised as *high-SU/high-PA* (n=232), *high-SU/low-PA* (n=811), *low-SU/PA/high-FV* (n=1471), and *low-SU/low-PA/FV* (n=2260).

Using the *low-SU/PA/high-FV* class as reference males were more likely to be in the *high-SU/high-PA* class (OR: 1.89; 95% CI: 1.39–2.57), and less likely to be in the *high-SU/low-PA* class (OR: 0.56; 95% CI: 0.47–0.67) than females.

Compared to White UK, Black Caribbean adolescents were less likely to be in the *high-SU/high-PA* (OR: 0.48; 95% CI: 0.30–0.76), or *high-SU/low-PA* (OR: 0.34; 95% CI: 0.26–0.45) classes. Black Africans were less likely to be in the *high-SU/high-PA* (OR: 0.18; 95% CI: 0.10–0.31), *high-SU/low-PA* (OR: 0.11; 95% CI: 0.08–0.15), or *low-SU/low-PA/FV* (OR: 0.55; 95% CI: 0.44–0.69) classes. Indians were less likely to be in the *high-SU/high-PA* (OR: 0.36; 95% CI: 0.19–0.71), or *high-SU/low-PA* (OR: 0.17; 95% CI: 0.11–0.26) classes. Pakistanis/Bangladeshis were less likely to be in the *high-SU/high-PA* (OR: 0.40; 95% CI: 0.23–0.68), *high-SU/low-PA* (OR: 0.08; 95% CI: 0.05–0.13), or *low-SU/low-PA/FV* (OR: 0.65; 95% CI: 0.50–0.85) classes.

Conclusion Latent class analysis is a valuable method for investigating ethnic variations in adolescent lifestyles. Ethnic minority adolescents tend to be in classes which are characterised by less unhealthy behaviour; patterns also vary between ethnic minority groups. Research needs to investigate risk and protective factors that may explain these ethnic variations to