corporate influences contributing to an obesogenic environment. A current focus in childhood obesity policy debates is the role that online advertising of high fat, sugar and salt (HFSS) food and beverages plays as a driver of childhood obesity and what regulation is required. However, there is a lack of research in this area as to public acceptability of regulation of online advertising of HFSS products as a viable policy solution. This study examines the perceptions of parents and stakeholders in regulating this online environment to answer how the regulation of online advertising of HFSS products to children is viewed in the UK?

Methods Three qualitative methods were triangulated: 1) eight focus groups with parents who have children aged between five and 15 years old; 2) a scoping review of 85 responses to a 2016 Committees of Advertising Practice consultation on non-broadcast advertising to children; and 3) 11 stakeholder interviews (industry, civil society, academics and government body). Data were analysed inductively and thematically using NVivo.

Results Parents reported finding it increasingly difficult to attain a healthy diet for their children, competing with a multitude of pressures, including online advertising of HFSS products. Non-industry stakeholders agreed with this perspective, whereas industry stakeholders were sceptical as to the influence online advertising had in contributing to an obesogenic environment. In terms of attitudes to regulation, two views emerged from the three data sets: 1) support for increased regulation of online advertising of HFSS products, or 2) the continuation of the current self-regulatory model. Underpinning their views were concerns as to the distribution of power within the obesogenic environment, with the majority of parents and all non-industry stakeholders describing the food and beverage industry as possessing too much power, and government and parents possessing too little. In contrast, the remaining parents and industry stakeholders argued that government possessed too much power and as such infringed on individual autonomy.

Conclusion Parents’ and stakeholders’ views in this study largely aligned with Beauchamp’s (1976) theory on social justice versus market justice. Although not generalisable, this study offers insights into how their perspectives on the distribution of power within the obesogenic environment may have informed their views on implementing increased regulation of the online advertising environment as a viable policy solution to tackle childhood obesity.

Background Adolescence is a period marked by critical changes in behaviours and body composition that place adolescents at an increased risk of becoming overweight and obese. Health education in schools has the potential to improve health behaviours by encouraging critical thinking about these issues. To develop sustainable interventions to prevent obesity, it is necessary to understand whether educational interventions during adolescence are effective, and which intervention elements are associated with improvements in BMI.

We addressed the question: do school-based educational interventions improve BMI in adolescence, and what intervention features are associated with effectiveness?

Methods We carried out a systematic review and meta-analysis of published intervention studies. We searched MEDLINE, PsycINFO, CINAHL, and ERIC from 2006 to 2017. Two

A SYSTEMATIC REVIEW AND META-ANALYSIS OF SCHOOL-BASED EDUCATIONAL INTERVENTIONS TO IMPROVE BODY COMPOSITION IN ADOLESCENTS

1CM Jacob, 2PL Langdon, 2H Inskip, 3TM Morris, 1C Parsons, 1M Hanson, 1K Woods-Townsend, 4J Baird. 1Institute of Developmental Sciences, Faculty of Medicine, University of Southampton, Southampton, UK; 2MRC Lifecourse Epidemiology Unit, University of Southampton, Southampton, UK; 3Southampton Education School, Faculty of Social Sciences, University of Southampton, Southampton, UK; 4NIHR Southampton Biomedical Research Centre, University Hospital Southampton NHS Foundation Trust, Southampton, UK

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Methods We carried out a systematic review and meta-analysis of published intervention studies. We searched MEDLINE, PsycINFO, CINAHL, and ERIC from 2006 to 2017. Two
independent researchers assessed titles and abstracts, extracted data and assessed risk of bias in the included studies, following the PRISMA guidance. Review inclusion criteria were: a) health education intervention, studies conducted in schools in high-income countries that included a control group b) participants aged 10–19 years, c) studies reporting BMI/BMI Z-score at baseline and follow-up. A meta-analysis was conducted combining findings of studies presenting data on BMI z-score (n=13). Heterogeneity was assessed using Cochran’s Q and the percentage of variability due to heterogeneity was quantified using I².

Results Searches identified 29,174 publications, of which 312 studies papers were selected as potentially meeting inclusion criteria. Twenty-five studies met the inclusion criteria. Most (n=18) were delivered by teachers in classroom settings, followed by researchers, schools nurses and students. Additional methods used in the interventions included out of class components, physical activity sessions, digital interventions and parent involvement. Eleven of the included studies were effective in improving BMI or BMI Z-score at follow-up periods from two months to two years post-intervention. Intervention features associated with effectiveness were the provision of training for teachers prior to intervention, and involvement of parents or families. Data from 13 of the 25 studies were included in a meta-analysis, using a random effects model. The overall pooled estimate of change in BMI Z-score in the intervention group, compared with the control group, demonstrated that BMI improved in adolescents exposed to the intervention (β= -0.10, 95% CI (-0.14, -0.05); p<0.001).

Conclusion This systematic review demonstrates that school-based educational interventions have the potential to prevent obesity in adolescence. Mediating factors associated with effectiveness included providing training for teachers prior to the intervention and involving parents or families.

Health inequalities

RF25 EFFECTS OF HOUSING FIRST APPROACHES ON HEALTH AND WELLBEING OF ADULTS WHO ARE HOMELESS OR AT RISK OF HOMELESSNESS: SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMISED CONTROLLED TRIALS

1/3AJ Baxter*, 2/EJ Tweed, 3/SV Katekredi, H Thomson. 1/College of Medical, Veterinary and Life Sciences, University of Glasgow, Glasgow, UK; 2/MRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, UK

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Background Access to housing is an important determinant of health, with homeless people having substantially increased morbidity and mortality compared to the housed population. Conventional ‘Treatment First’ (TF) models for tackling homelessness provide temporary accommodation conditional on adherence to services to address health needs, particularly substance use. A new policy approach aiming to end homelessness provides temporary accommodation conditional on abstinence from substance use. This has been noted by other reviewers as improving housing stability, but at the potential cost of removing incentives to use health services and abstinence from harmful substances. Conversely, increased housing stability may lead to health improvements. We aimed to systematically review the evidence from randomised controlled trials to evaluate the effects of HF on health and well-being.

Method We searched seven databases for randomised controlled trials of interventions providing rapid access to non-abstinence-contingent, permanent housing. We extracted data for the following primary outcomes: mental health; self-reported health and quality of life; substance use; non-routine use of healthcare services. Data recording housing stability was extracted as a secondary outcome. We assessed risk of bias and calculated standardised effect sizes.

Results We included four studies, all with ‘high’ risk of bias. The impact of HF on most short-term health outcomes was imprecisely estimated, with varying effect directions. No clear difference in substance use was seen. Intervention groups experienced fewer emergency department visits (incidence rate ratio (IRR)=0.63; 95% CI 0.48 to 0.82), fewer hospitalisations (IRR=0.76; 95% CI 0.70 to 0.83) and less time spent hospitalised (standardised mean difference (SMD)= -0.14; 95% CI -0.41 to 0.14) than control groups. In all studies intervention participants spent more days housed (SMD=1.24; 95% CI 0.86 to 1.62) and were more likely to be housed at 18–24 months (risk ratio=2.46; 95% CI 1.58 to 3.84).

Conclusion HF approaches successfully improve housing stability and may improve some aspects of health. Implementation of HF would likely reduce homelessness and non-routine health service use without an increase in problematic substance use. Impacts on long-term health outcomes require further investigation.