

Monthly SSB imports increased by 3 69 000 litres per month following the tax [95% CI 325,000 to 4 13 000]. Non-SSB imports increased by 2 81 000 litres per month [95% CI 268,000 to 294, 000].

Conclusion The Barbados SSB tax was not associated with a reduction in SSB sales at this grocery store chain, although there is evidence of a reduction at the end of the study period. National data suggest that SSB imports (which may be cheaper) increased. The grocery store analysis also suggest that sales of imported SSBs increased, while locally manufactured SSBs decreased, suggesting that consumers may be substituting to imported beverages. A higher rate of tax may be needed to reduce consumption of SSBs.

OP5 **#EXPLORING INDUSTRY INFLUENCE ACROSS ALCOHOL AND SUGAR PRICING POLICIES IN THE UK: A DISCOURSE NETWORK ANALYSIS**

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10.1136/jech-2018-SSMabstracts.5

Background Increasingly unhealthy commodity industries (UCIs) strategically use the news media to influence public opinion and the political agenda in favour of advancing their preferred policy options. In politically-charged pricing policy debates, such as Minimum Unit Pricing (MUP) for alcohol and sugar-sweetened beverage (SSB) taxation industry efforts to disrupt the introduction of these pricing policies has been significant. By comparing MUP for alcohol and SSB taxation media debates using discourse network analysis (DNA) we aim to visually map the actors and their relationships highlighting similarities and differences across industry sectors.

Methods Eleven national UK newspapers, spanning political views and genre, were searched using the Nexis database between May 2011 and November 2012 to identify all published articles relating to alcohol and pricing, and between May 2015 and November 2016 to identify all published articles relating to sugar/beverage and tax/levy. Statements made by actors and organisations in the debates were inductively identified and coded using network analysis software to produce relational data to generate visualisations of discourse networks.

Results For MUP for alcohol 1435 statements made by 151 individuals from 87 organisations were coded in 351 articles. For SSB taxation 3882 statements made by 214 individuals from 177 organisations were coded in 511 articles. The construction of MUP for alcohol and SSB taxation networks provides the first visual evidence of the positioning of industry representatives across two policy debates. Both networks show tight discourse coalitions of manufacturers acting in opposition to policy advocates, with the largest corporations most active, and most central in these coalitions at key points in the debate. Less active industry representatives and cross-sector corporations (such as supermarkets) are more peripheral to the network, indicating both cleavages within industries and across corporate actors.

Conclusion By comparing the discourse networks across two highly contested pricing policy debates, we have visualised the complex network of actors and relationships operating to directly influence pricing policy-making via the media. Conducting comparative discourse network analysis across policy debates shows promise for better understanding the common

tactics of different UCIs to disrupt public health policies. This is important for supporting public health advocates to develop more effective media advocacy strategies for exposing and opposing UCI tactics and strategies and in identifying public health messages which might be targeted to generate public and policy support for pricing policies.

Obesity

OP6 **RAPID WEIGHT GAIN IN THE FIRST FEW YEARS OF LIFE AND CHILD-TO-ADOLESCENCE BMI TRAJECTORIES: THE UK MILLENNIUM COHORT STUDY**

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10.1136/jech-2018-SSMabstracts.6

Background High birthweight and rapid weight gain (RWG) in early life are independently and positively associated with obesity in childhood and adulthood. It is unclear whether RWG can affect BMI growth from childhood to adolescence. RWG is common among low-birth-weight infants, especially following intrauterine growth retardation. However, whether the association between RWG and BMI trajectory differs by birthweight groups is not well understood. We aimed to investigate the effect of RWG (birth-3 y) on BMI trajectory (5-14 y) and whether associations differed by birthweight groups.

Methods We used data from the Millennium Cohort Study, a representative sample of children born in the UK in 2000-2002. We included term singletons with available information on weight gain (birth-3 y) and 1+ BMI measurement between 5 y and 14 y (n=11,522). Weight at birth and 3 y were converted to internal standard deviations scores (SDS). RWG was defined as change in weight SDS from birth to 3 y >0.67SDS, which is commonly used and represents the width of each percentile band on standard growth charts. Mixed effects fractional polynomial models were applied to estimate the effects of RWG on BMI trajectories, for boys and girls separately, before and after adjustment for maternal pre-pregnancy, maternal smoking during pregnancy, parity, ethnicity, breastfeeding, early introduction to solid foods, maternal education, and family income. The analysis was further stratified by low birthweight (LBW) status.

Results Boys and girls who experienced RWG were heavier than their non-RWG counterparts at 5 y by 1.21 kg/m² [95% CI 1.10 to 1.33] and 1.25 kg/m² [1.13-1.38] respectively; continued to gain weight more rapidly between 5 y and 14 y, especially in childhood (5-7 y) by 0.2-0.3 kg/m² per year. These differences persisted after adjustment for potential confounders. The effect of RWG on BMI was particularly higher among non-LWB children, whose estimated BMI trajectories exceeded the International Obesity Task Force overweight reference lines. For example, at 14 y the estimated mean BMI was 24.41 kg/m² [23.91-24.45] for non-LBW RWG girls (vs. 22.07 kg/m² for LWB RWG girls), exceeding the gender- and age-specific cut-off point of 23.34 kg/m² for overweight. Sensitivity analysis using 3-category birthweight variable (low/normal/high) showed that the trajectories of high-birthweight children were similar to those of normal-birthweight children.