RACIAL DISCRIMINATION PREDICTS BODY WEIGHT GAIN IN BLACK INDIVIDUALS IN FOUR YEARS FOLLOW-UP OF THE ELSA-BRASIL COHORT

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Background Obesity is a worldwide public health problem, and large disparities between racial groups have been reported. The North American literature suggests that racial discrimination can accelerate the increase in body weight throughout life. As racism in Brazil has different and specific facets, our study aims to describe the racial difference in body weight and BMI (kg/m²) gain in four-years follow-up and to investigate whether racial discrimination changes these trajectories among Black and Brown individuals.

Methods The present study compares body weight and BMI changes between the 1st (2008–2010) and the 2nd visits (2012–2014) of 13,133 participants of the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil) according to race/skin color. In order to investigate whether racial discrimination predicts greater weight and BMI gain in Blacks and Browns (N=5,983), we used mixed-regression models. Information on racial discrimination, assessed by the modified version of the Lifetime Major Events Scale, and on sociodemographic, behavioral, and depressive episode factors were obtained at the 1st visit.

Results Mean age of participants was 52 years, 54% were female, 54% self-declared as White, 29% as Brown and 17% as Black. The median follow-up time was 3.9 years. During the study period Whites, Blacks and Browns gained an average 1.2 kg, 1.2 kg, and 1.4 kg, respectively, corresponding to an average increase in BMI of 0.60, 0.56 and 0.65 kg/m², respectively (p<0.05). Racial was reported by 6.3% of Brown and 32.1% of Black participants. The weight gain was greater among Black (2.1 kg versus 1.0 kg, p<0.001) and Brown individuals (1.9 kg versus 1.1 kg, p=0.02) who reported racial discrimination as compared to those who did not report. Mixed-effects regression models demonstrated that Blacks who reported racial discrimination had greater weight and BMI increases than those who did not report, even after adjustment by potential confounders (age, sex, education and income). These results remained statistically significant even after adjusting for mediating variables of the association between discrimination and weight/ BMI gain (smoking, physical activity, alcohol consumption and depressive episode). In Browns, racial discrimination was not an independent predictor of weight gain and BMI over time.

Conclusion Weight and BMI gains were observed among all race/skin color groups examined, with no statistical differences between them. The results indicate that Black individuals who reported racial discrimination had greater weight and BMI increases in the study period than those who did not, reinforcing the importance of public policies against racial discrimination to reduce racial disparities in health.

P56 PROMOTING HEALTHY INFANT FEEDING TO PREVENT CHILDHOOD OBESITY: PROCESS EVALUATION OF THE CHOOSING HEALTHY EATING FOR INFANT HEALTH (CHERISH) INTERVENTION

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Background The CHERISH Choosing Healthy Eating for Infant Health intervention is a brief intervention to be delivered during routine vaccination visits, to improve healthy infant feeding behaviours among parents to help reduce the risk of childhood obesity. An accompanying implementation strategy...
CUTS TO SPENDING ON SURE START CHILDREN'S CENTRES AND CHILDHOOD OBESITY: EVIDENCE FROM A NATIONAL, LONGITUDINAL ECOLOGICAL STUDY IN ENGLAND

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Background Childhood obesity is rising in disadvantaged areas in the UK. Whilst the causes of childhood obesity are multiple and complex, modifiable pathways may operate through provision of community-based services in the early years, where healthy nutrition and physical activity can be supported in numerous direct and indirect ways. In England, local authority-run Sure Start children’s centres have been an important source of parenting programmes; early learning and childcare; promotion of breastfeeding, active play and good nutrition; and links with employment and welfare support.

Austerity measures adopted by the UK government since 2010 resulted in large cuts to local authority (LA) budgets and, consequently, dramatic reductions in many councils’ expenditure on non-statutory services, including Sure Start centres. Reduced investment in these centres may affect a range of child health and development outcomes, including childhood obesity. We assessed whether spending cuts were associated with the prevalence of obesity at school reception (age 4–5 years).

Methods This is a longitudinal ecological study over the period 2010–2017. Our main exposure was LA expenditure on Sure Start centres using data from the Department for Education. Our outcome was obesity prevalence at reception, using data from the National Child Measurement Programme. We used fixed-effects panel regression, controlling for secular changes in obesity prevalence and time-varying confounding by local economic conditions and levels of child poverty. We examined interactions with LA deprivation and pre-2010 obesity trends, and conducted a negative control analysis using spending on services for older children as a control exposure.

Results Between 2010 and 2017, spending on Sure Start and early years’ services decreased by 56% on average across LAs in England, and more in deprived areas. Childhood obesity prevalence plateaued overall, but continued to increase in some areas, particularly more deprived areas. Our analysis indicates that, on average, obesity prevalence increased in areas with larger cuts to Sure Start spending. We estimate that each 10% spending cut is associated with a 0.34% relative increase in obesity prevalence (95% CI:0.15%-0.53%). There is some evidence that this association is stronger in the most deprived areas and in areas where obesity prevalence had been falling prior to 2010.

Conclusion Our findings suggest cuts to local authority spending on children’s centres are associated with increased childhood obesity. Disinvestment in the services these centres provide in the early years may be undermining progress in reducing the prevalence of childhood obesity. Limitations of the study include a reliance on area-level obesity data.