Fastest growth in childhood overweight/obesity in England among children 11 to 15 years old, finds study

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The fastest and highest growth in the prevalence of childhood obesity in England has been among 11–15-year-olds, rising from 30% in 1995 to 38% in 2019, finds a detailed analysis of national data, published online

in the *Archives of Disease in Childhood*.

But the inequality gap in rates has deepened, driven primarily by differences in deprivation, gender, family structure, ethnicity and parental education, the analysis reveals.

And the current cost of living crisis is set to aggravate these disparities, putting even more disadvantaged children at risk, warn the study authors.

England is projected to have the highest prevalence of obesity in Europe by 2030, with more than 35% of adults living with obesity. More than a third of children are currently overweight or obese.

In 2019–20, obesity was listed as a factor in more than 1 million hospital admissions, with direct NHS costs estimated at more than £6 billion annually.

To comprehensively analyze trends in childhood obesity patterns over time (1995 to 2019) and explore socioeconomic disparities in prevalence, the researchers drew on data from the annual Health Survey for England (HSE) and compared them with the National Child Measurement Program (NCMP) for primary school children.

They grouped the children by age: 2–4; 5–10; and 11–15. And they assessed household educational attainment up to degree level or equivalent; family structure; white or non-white ethnicity; and the residential area measure of multiple deprivation (IMD).

In all, data for 56,583 HSE children were included in the analysis. This showed that the overall prevalence of childhood overweight/obesity rose from just under 26% in 1995–6 to just over 29% in 2019, peaking at 33% in 2003–4, after which it leveled off.

The largest and fastest rise in overweight/obesity prevalence was in 11–15-year-olds, particularly boys, among whom it rose from 27.5% in 1995 to 42% in 2019. Among girls in this age bracket, it increased from just over 28% to 36%.

Analysis of socioeconomic circumstances showed that between 2001 and 2019, rates of childhood obesity/overweight diverged by deprivation level.

Between 1997 and 2014, children in households with adults educated to degree level generally had lower obesity rates than those with lower level or no formal qualifications.

And while there was no difference in the prevalence of childhood obesity/overweight between single and couple-parent families in 1995, by 2015–16, it was 34% for single-parent families compared with just under 29% for couple-parent families.

Ethnicity trends in the prevalence of overweight/obesity reversed over time. Initially, prevalence was higher in white children: 26% vs. 24.5%. But by 2015–16, this had risen to 34.5% in non-white children, compared with 26% in white children.

From 2003 onward, the inequalities gap seemed to be driven by stable prevalence of overweight/obesity in more advantaged children and increasing prevalence among disadvantaged children, the figures indicate.

Comparison with the NCMP data showed similar diverging socioeconomic trends in the patterns of childhood overweight/obesity.

This is an observational study, which didn't set out to investigate causal factors. And the authors acknowledge various limitations to their

findings, including the binary classification of ethnicity, and small sample sizes and variable response rates in the HSE data.

But they nevertheless conclude, "This study demonstrated that stable overall trends in childhood overweight and obesity in England concealed deepening inequalities across deprivation, gender, family structure, ethnicity and parental education.

"These findings highlight the urgent need to prioritize understanding and addressing these inequalities as a public health imperative, given the serious health implications of childhood obesity."

They add, "The current cost-of-living crisis threatens to further exacerbate these inequalities, impacting access to healthy foods, quality education, health care, safe environments and stable employment. Proactively tackling these social determinants is essential to curb the escalating impact of this crisis on childhood obesity and to narrow the health inequality gap."

More information: Trends in inequalities in childhood overweight and obesity prevalence: a repeat cross-sectional analysis of the Health Survey for England, *Archives of Disease in Childhood* (2024). DOI: 10.1136/archdischild-2023-325844

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