

BASCD 2023 ABSTRACT #04**An upward trend in sugar-sweetened beverages-attributable burden in Ireland and the UK**

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Background:

High consumption of sugar-sweetened beverages (SSB) poses a substantial risk for non-communicable diseases, poor oral health, and childhood obesity globally. However, the SSB-attributable burden (premature mortality and disability) has not been estimated comprehensively in Ireland and the United Kingdom (UK). The Global Burden of Disease (GBD) 2019 Study was used to estimate SSB-attributable burden in Ireland, Northern Ireland, England, Scotland, and Wales from 1990 to 2019.

Objectives:

To compare and benchmark SSB-attributable burden across these five countries.

Methods:

The GBD comparative risk assessment framework was used to estimate age, sex, and location-specific SSB-attributable burden using standardised metrics (age-standardised death rates, years of life lost [YLLs], years lived with disability [YLDs], and disability-adjusted life years [DALYs]). DALYs are based on YLLs and YLDs. Mathematically, DALY = YLL + YLD. The GBD uses Euromonitor International data for attribution analysis caused by excessive SSB intake. Estimated annual-percentage-changes (EAPC) were also calculated.

Results:

SSB-related age-standardised YLDs (per 100,000) increased across all regions from 1990 to 2019, with the highest increase (230%) observed for Ireland. The greatest rise in YLDs was observed in the 15-49 age-group for all regions, with England showing the largest increase (367%), followed by Ireland (309%). SSB consumption increased across all ages and sexes in all regions, except for the 70+ age-group in England. Specifically, the highest SSB consumption rate (per 100) of 77.9 (95% Uncertainty Interval [UI]: 61.6–90.4) was observed for the 15-49 age-group of Ireland. However, age-standardised DALYs (per 100,000) decreased for all regions from 1990 to 2019, with Northern Ireland having the greatest reduction of 52.4%.

Conclusion:

This study shows a considerable increase in SSB consumption and SSB-attributable disability in Ireland and the UK, especially among the 15-49 age-group, which suggests a rethinking of the current oral health policies in these regions.

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