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Scottish Burden of Disease (SBOD) study: developments and findings of local estimates

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Background

A criticism of Burden of Disease (BOD) estimates has been that they only provide evidence for national policy and aren't relevant for local needs. This has led to a growing call for BOD studies to provide more granular estimates for sub-national geographies, particularly within European countries, to help support local policy makers with evidence-based decision making.

Aim

To develop local BOD estimates and investigate inequalities in BOD within and across local areas of Scotland.

Methods

Estimates of Years Lived with Disability (YLD), Years of Life Lost (YLL), DALYs (Disability-adjusted Life Years), prevalent cases and mortality counts were developed for 68 conditions. Morbidity estimates were calculated based on a three-year average of 5-year age-group, sex and deprivation decile rates per person (from the SBOD 2016 study) which were applied to 2016 mid-year local population estimates. Mortality estimates were based on a three-year average (2014-16) sourced from the National Records of Scotland register of deaths. Direct age-standardised rates and numbers were produced for regions (3), NHS boards (14) and local authorities (32) by age-group and sex.

Results

Across local authorities the male rate of all-cause DALYs ranged from 20,996 (per 100,000 population) to 33,442 and the female rate of all-cause DALYs ranged from 19,889 to 27,684. Inequalities in age-group (15-24; 25-44; 45-64; and 65+ years) differences between all-cause DALYs rates in the area with the highest and lowest rates ranged from 58.4% to

98.0% in males. Comparable estimates were slightly lower for females, but inequalities in rates were wider (41.4% to 87.4%).

Conclusion

Inequalities in BOD across areas highlight the need for action at all levels. These local estimates provide a huge opportunity to work towards and beyond the 2020 vision of the Scottish Government by ensuring that we have the right workforce and services to achieve a healthier Scotland.

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