

Rates of self-harm and suicide by sexual identity - A national population-based study in England and Wales

3. Epidemiology and surveillance

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Abstract text

Background: Sexual minority (SM; LGB+) individuals have substantially higher risk for suicidality and self-harm compared to heterosexual peers. The UK Government's 2023 Suicide Prevention Strategy reports there is developing research to understand the risk of suicides in this group. However, national population-based estimates on suicide by sexual orientation especially in Europe, are limited. We aim to understand how rates of suicide and self-harm differ by sexual identity and the groups within the LGB+ population at higher risk of suicide and self-harm.

Methods: We created a unique, nationally representative dataset linking the 2021 Census for England and Wales, ONS death registrations data, with Electronic Health Records via the NHS Patient Demographic Service (PDS). The study population included those aged 16 years and over who responded to the sexual orientation question on the 2021 Census for England and Wales and could be linked to the NHS PDS. The outcomes were death by suicide (ICD-10 codes X60-X84 and Y10-Y34) and at least one hospital episode for self-harm (ICD-10 codes X60-X84, and SNOMED codes 248062006 and 276853009). Age standardised rates per 100,000 people by sexual identity (gay/lesbian, bisexual, 'other' vs. heterosexual) were calculated and broken down by a range of sociodemographic, geographical, socioeconomic and health variables; including sex, ethnicity and Index of Multiple Deprivation (IMD) decile. We calculated ratios of age standardised rates for the LGB+ groups vs. the heterosexual group to understand groups with the largest relative risk of self-harm and suicide.

Impact: Understanding the rate of self-harm and suicide in the LGB+ population is important to inform the UK Government's suicide prevention strategy and further research supporting the mental health of sexual minority groups. This analysis is the first of its kind in England and Wales providing national population-based estimates using the 2021 Census linked with death registrations and Electronic Health Records.