

65 years was 2.9 (95% CI: 1.6–5.2) and 5.8 (2.5–9.7) for males and females, respectively. After adjustment for the Gini coefficient, the RII increased to 4.2 (2.6–6.6) and 6.3 (3.9–10.1) for males and females, respectively. Inequalities in treatment among older hypertensive females were similar in magnitude before and after adjustment for the Gini coefficient, with an estimated RII of 0.6 (0.5–0.8) and 0.7 (0.5–0.8) respectively.

**Conclusion** Multilevel analyses are required to better estimate inequalities. Chile currently needs interventions to improve the management of hypertension and simultaneously, decrease inequalities, first, in hypertension prevalence among younger males and females and, secondly, in its management among older hypertensive females.

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#### SOCIOECONOMIC DISPARITIES IN THE DEVELOPMENT OF MULTIMORBIDITY IN SCOTLAND: THE BENEFITS OF APPLYING A LIFE COURSE LONGITUDINAL APPROACH

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**Background** There is widespread acknowledgement that we need to go beyond the single disease framework when trying to understand health inequalities across the life course. In Scotland, evidence based on primary care records showed that more than half of the people aged 65 years and older had at least two chronic diseases. Multimorbidity, defined as the cooccurrence of two or more chronic diseases, was also shown to be more prevalent in women and those with lower socioeconomic status (SES). The vast majority of multimorbidity research (and the indicators used) is situated within a cross-sectional framework, and a typical goal is to identify disease clusters at a single point in time.

We aim to investigate the social patterning of multimorbidity trajectories in Scotland using both cross-sectional and longitudinal approaches.

**Methods** We use the Scottish Longitudinal Study (SLS) which links 1991, 2001 and 2011 censuses, vital events and other administrative or publicly available data sets for a 5% representative sample of the Scottish population. Our subsample focuses on 120 000 SLS individuals aged 40 years and over at the time of the Scottish census 2001, linked to their Scottish census 2011, hospitalisation and death records. Our sample is followed for up to 10 years (next census), censoring for death or emigration. Multimorbidity is identified using hospitalisation data and the list of comorbidities of the Charlson Index using Quan et al. algorithm (2005). Educational level in 2001 and the Scottish Index of Multiple Deprivation (SIMD) are used as SES proxies. Poisson and Cox regressions are used to explore SES inequalities in multimorbidity index at baseline and over time.

**Results** As expected, we find that multimorbidity is socially patterned: Individuals with lower education and who live in more deprived areas experienced faster levels of multimorbidity accumulation. In a separate analysis, we use single-channel

sequence analysis to characterise multimorbidity trajectories and sequences of disease onset and relate this to social inequalities.

**Conclusion** This study highlights the need to go beyond a cross-sectional approach in researching multimorbidity differences. It shows the influence of the timing of and sequencing of disease onset in shaping social health inequalities in later life and it also provides a characterisation of multimorbidity progression through the application of longitudinal methods used in life course studies. With new data linkages, capturing detailed disease onset, and timing linked with social factors, research of the social patterning of multimorbidity progression can be advanced and fed into prevention strategies.

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#### AN INDIVIDUAL PARTICIPANT DATA META-ANALYSIS EXAMINING HEALTH INEQUALITIES FACING OLDER LESBIAN, GAY AND BISEXUAL PEOPLE AGED 50 AND OVER IN THE UNITED KINGDOM

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**Background** Older lesbian, gay and bisexual (LGB) people were born at a time same sex activity between men was a criminal offence, and where social and legislative conditions permitted discrimination against sexual minorities across a spectrum of domains. Minority Stress Theory posits that LGBT people are at an elevated risk for poorer health because of their exposure to social stress related to prejudice and stigma. Modelling the health and care trajectories of lesbian, gay and bisexual (LGB) is essential to identify inequalities and support needs, yet because of the small sample of LGB people in any one survey, current evidence relies on studies that have poor generalisability and low power. This study assesses the magnitude of health and care inequalities among older LGB people across ten outcomes, informed by evidence on the health trajectories and distinct history of LGB people in the UK.

**Methods** A systematic review was conducted of representative data sources on older LGB and heterosexual people's health and care status in the UK. Individual Participant Data (IPD) meta-analysis was employed to synthesise data. To account for the intricacies of individual datasets, the analysis employed a two-stage approach where an odds ratio (OR) and standard error was calculated for each dataset individually, before being meta-analysed through DerSimonian and Laird random effects models.

**Results** Our largest model incorporated data from 25 different datasets and provided an unparalleled sample size (over 2,500 LGB men and women) to measure the magnitude of sexuality-based health inequalities in later life. We find that among men aged 50 and over, being gay, bisexual or having another non-heterosexual orientation is associated with an increased risk of reporting a long-term illness and limitations due to health or illness. Indicators of mental health also suggest that gay and bisexual men are more likely to report low life satisfaction and substantially more likely to have attempted suicide over their life time (Adjusted Odds Ratio: 2.29; 95% Confidence Interval: 1.19–4.42). We find that among women, differences in health are apparent with regards to self-rated health as well as with engagement with risky health behaviours with higher levels of smoking and frequent alcohol consumption.