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Association between receipt of social care and multimorbidity: evidence from a population-sized cohort in Scotland

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Multimorbidity, the presence of two or more long-term conditions, is associated with numerous negative outcomes. Little is known, however, about the relationship between multimorbidity and social care use (also known as long-term care). This is important as many developed countries seek to integrate health and social care services as a means of improving quality of services at the same time as making efficiency savings.

The aim of the study was to assess the relationship between receipt of formal social care services, sociodemographic variables, and two proxy measures of multimorbidity.

For this retrospective population-based observational study including all individuals over the age of 65 in Scotland in financial years 2014/15 and 2015/16 ($n = 975,265$), we linked the Scottish Social Care Survey (which holds information on those receiving social care from local authorities) to administrative NHS community prescribing and demographic records. The main outcome binary measure was presence or not in the social care survey. Two proxy measures of multimorbidity were derived from prescribing data. We used logistic regression models and report Average Marginal Effects (AME).

Fifteen percent of all individuals received formal social care services. After adjustment for other modelled factors, multimorbidity showed an increasing magnitude of effect on receipt of social care (AME 16.4% (95% CI 16.2–16.6%) increased probability for 9+ medicines compared to 0–2 medicines, AME 18.8% (95% CI 18.5–19.1%) increased probability for 6+ BNF chapters compared to 0 BNF chapters). The magnitude of effect of deprivation on social care receipt was lower (AME 5.1% (95% CI 4.8–5.4%) increased probability in the most deprived area decile compared to the most affluent) after adjusting for multimorbidity and other demographic factors.

This is one of the first studies to demonstrate an association between multimorbidity and receipt of social care. Increasing prevalence of multimorbidity has greater societal implications than previously described.

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