

## **A place-based approach to examining multimorbidity: physical and social neighbourhood features and the development of multiple long-term health conditions**

Multimorbidity, defined as the co-existence of two or more long-term conditions, is a major global public health challenge with significant impacts for health and social care systems. There is a substantial body of work identifying different individual- and household-level determinants of multimorbidity, yet the role of place-based characteristics in affecting multimorbidity remains limited. This presentation will firstly provide an overview of a systematic scoping review examining place-based risk factors for multimorbidity, and synthesises the potential pathways explaining these relationships. We will then present findings from analyses of a large-scale linkage study created using data from administrative and statistical sources (the Scottish Longitudinal Study) including linked census and hospitalisation data. In particular, we examine the role of place-based factors including air pollution, green space and social capital in explaining multimorbidity health outcomes. We finish the presentation by suggesting a future research agenda for work on the role of place in understanding multimorbidity. This agenda includes adopting more precise measures of place-level environmental exposures, exploiting electronic health records to develop more nuanced measurements of multimorbidity, and a greater use of longitudinal study designs, or analytical approaches better suited to identifying causal processes.

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