

R055: The relationship between neighbourhood deprivation levels and indicators of social distress – UU

Social determinants of health are defined by the World Health Organization (WHO) as the conditions in which people are born, grow, live, work, and age (US Department of Health and Human Services, 2020). While persistent deprivation is a key factor for analysis, recent research suggests that, as area-level deprivation definitions may persist across time, the movement of people in and out of these areas (the churn) may show movement of these people in to or out of areas of higher deprivation (Jiang, Pacheco & Dasgupta, 2019). Within Northern Ireland (NI) we can use time-stamped small area-level deprivation measures to identify those areas classed as persistently deprived.

This project is one part of a two-part project: this part focusing on the relationship between neighbourhood and localised personal distress (measured through hospital episodes and prescribing levels); with the focus of the other study (through NISRA) revolving around socioeconomic trajectories and related outcomes of those who live in these areas (especially over time) and those who leave.

This HBS-based project utilizes: (a) linked administrative data from the GP registration system; (b) the patient administration system; (c) accident and emergency (A&E) presentations in all trust areas – the NIRAES and Symphony systems; (d) the enhanced prescription database; (e) NI multiple deprivation measures (at SOA level); (f) the self-harm register; (g) and mortality data.

One feature of current research is that it typically focuses on urban areas. Figures released by NISRA suggest that in NI, while deprivation is more visible in urban areas, it is also a rural (and specifically border-area) phenomenon (Northern Ireland Assembly, 2018). This research will allow equal weight to be given to both urban and rural areas.

Research objectives:

The primary research objective will test the overall hypothesis that there are areas of deprivation that remain persistent and that these are associated with indicators of social distress and poorer outcomes for people that live there.

It will:

1. use deciles of MDM to identify areas of deprivation within NI,
2. examine if these areas are associated with higher levels of social distress in the form of:
 - a. Specific types of visits to accident and emergency departments such as non-accidental visits or presentations linked to the use of alcohol,
 - b. Use of medications such as anti-depressants, anxiolytics, tranquilisers and sleeping tablets, and
 - c. Incidents of self-harm presentation at A&E departments
3. compare those areas of Northern Ireland that remain persistently deprived with those where improvement in the material social fabric is measurable - and within this identify:
 - a. the characteristics of those who remain,
 - b. if they leave, who leaves,
 - c. if they stay, who stays.
4. Identify the extent of these clusters at both urban and rural levels.