

# FOCUS ON RESEARCH

## EXPLORING THE RELATIONSHIP BETWEEN RURALITY AND HEALTH IN SCOTLAND: A PHD STUDENTSHIP

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**Aim** To examine whether routinely available national datasets can be used to study the relationship between location and health outcomes, after allowing for differences in the characteristics of people living in different locations, and in the nature of general practices serving them.

**Project Outline/Methodology** Initially the student conducted a literature review to familiarise himself with key policy issues, and previous research in the area. This was followed by the identification and acquisition of a number of datasets held by the Information and Statistics Division, NHS in Scotland, in conjunction with the Primary Care Platform Project. The datasets were linked in a variety of ways and analysed using a number of statistical techniques.

**Key Results** When area-based data were used, and after adjustment for differences in population characteristics, people living in rural areas tended to have better health than those living in cities with respect to premature mortality, self-reported general health, hospital episodes related to drug use and proportion of the population prescribed drugs for depression, anxiety or psychosis; but poorer health with respect to hospital episodes related to alcohol use and emergency hospital admissions. When individual-based data were used, and adjusted for the characteristics of the different populations and practices, people in rural areas were found to have higher rates of total hospital stays than their urban counterparts, but there were no significant differences in relation to prevalence of hypertension, mortality and hospital admissions to admissions related to CHD. The work identified a number of gaps in

currently available datasets, which currently prevent greater exploration of the relationship between rurality and health.

**Conclusions** Linking routinely available datasets provided interesting new insights into whether rural populations experience different patterns of health than urban ones. Rural populations appear to differ from urban ones in a variety of health outcomes, although these differences may be explained (at least in part) by differences in the characteristics of people living in different areas, and the practices serving them. These conclusions, however, were based on only a small number of health indicators, and would be strengthened by making routinely available datasets more useful (partly by including more health outcomes in routine surveys).

**What does this study add to the field?** The work has added to the currently limited data about health and location in Scotland. It has also shown the strengths and limitations of routinely available datasets for exploring this issue.

**Implications for Practice or Policy** Future health surveys should include more health outcomes, and should continue to obtain permission from participants to link their survey data with routine collected health datasets, using a common identifier, such as the Community Health Index number.

**Where to next?** Further work is need to examine whether area-related differences exist for other outcomes. Such research will inform better targeting of services and resources to need.

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