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Characterising residential mobility during childhood: comparing north-east London and Wales using linked electronic health records

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Objectives

Understanding the sociodemographic drivers of childhood residential mobility is important due to associations with adverse health and educational outcomes. Using electronic health records (EHRs) and residential anonymised linkage fields (RALFs), we examined if household characteristics are associated with residential mobility in two distinct geographies: Wales and north-east London (NEL).

Methods

We carried out an observational longitudinal study using EHRs from the SAIL Databank (Wales) and Discovery Data Service (NEL). We included 398,959 (51.3% male) children in Wales and 240,509 (51.0% male) children in NEL, aged 0-13 years on 1/1/2015, with complete follow-up until 31/12/2019. We defined residential mobility as at least one change in RALF during the five-year follow-up period. We estimated odds ratios (OR) and 95% confidence intervals (CI) for residential mobility by interactions between age group (0-4, 5-9, 10-13 years), number of children in the household, and household composition, adjusting for baseline demographic-, household-, and area-level characteristics.

Results

32.1% and 21.6% of children experienced residential mobility, with 9.1% and 3.0% moving more than once in Wales and NEL respectively. In both geographies, residential mobility decreased as age group increased: NEL: 25.3%, 18.7%, 15.6%; Wales: 40.1%, 29.4%, 23.6%. In the fully adjusted model including interactions, all children in Wales, and 10-13-year-olds in NEL living with a single adult were more likely to experience residential mobility (10-13-year-olds in Wales: OR: 1.82; 95%CI: 1.73,1.91; NEL: 1.15; 1.07,1.25) compared with those living with two working-age adults. 5-13-year-olds in Wales and 10-13-year-olds in NEL were more likely to experience residential mobility if there were four or more children in the household (Wales 5-9-year-olds: OR: 1.21; 95%CI: 1.14,1.29; 10-13-years-olds: 1.68; 1.56,1.82; NEL 10-13-year-olds: 1.31; 1.18,1.46) compared with one child.

Conclusion

We examined residential mobility in two distinct geographies with different levels of ethnic diversity and area-level deprivation. Given the wide-ranging adverse impacts of high residential mobility, our cross-country comparison provides a more comprehensive understanding of the characteristics of those who move, with the potential to better support families.

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