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Household Living Arrangements and the Risk of COVID-19 Among Disabled People in Scotland: A Population-Based Study Using Linked Administrative Data

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Objectives

This study examines the associations between household living arrangements and COVID-19 outcomes (infection and severity) among people with intellectual and physical disabilities in Scotland. Understanding these associations will help identify disparities, inform pandemic preparedness, and contribute to evidence-based policies aimed at protecting vulnerable populations from infectious diseases.

and mortality among disabled individuals compared to non-disabled individuals. By integrating novel measures of household composition with administrative health data, the findings will inform public health strategies aimed at reducing health inequalities and improving pandemic response planning for vulnerable populations.

Methods

A retrospective, population-based study is being conducted using linked administrative data covering approximately 90% of the Scottish population from March 1, 2020, to December 30, 2022. Cox Proportional Hazards Models will assess the associations between household living arrangements and COVID-19 outcomes. Data sources include the 2011 Census (disability status, demographics, socio-economic details), Community Health Index Register and Ordnance Survey data (household composition), and Public Health Scotland's COVID-19 Research Database (infection status, hospitalizations, mortality, and pre-existing conditions).

Results

Data processing and preliminary analysis are underway. The study will evaluate differences in COVID-19 infection and severity (hospitalization and mortality) across various household living arrangements, comparing disabled and non-disabled populations. Expected findings include potential disparities based on household composition, such as differences in infection risk for those living alone, in shared residences, or institutional settings. Full results, including hazard ratios and statistical significance, will be presented at the conference.

Conclusion

This study will enhance understanding of how household living arrangements impact COVID-19 infection, hospitalization

