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Area Deprivation, Urbanicity and Severe Mental Illness – A Population-Based Linkage Study Using Routinely Collected Primary and Secondary Care Data

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Background with rationale

There is a long-standing debate regarding the associations between area deprivation, urbanicity and elevated risk of severe mental illnesses (SMIs).

Main aim

We investigated the associations between area deprivation, urbanicity and risk of SMIs in a population cohorts in Wales.

Methods/Approach

We extracted primary and secondary care electronic health records from 2004 to 2015 from Wales's population. We identified prevalent and incident individuals with SMIs (schizophrenia related disorders and bipolar disorder) and their level of deprivation and urbanicity. We used the Welsh Index of Multiple Deprivation (WIMD) and urban/rural indicator to measure the level of area deprivation and urbanicity respectively for all lower layer super output areas, the geographic units used in the reporting of small area statistics comprised of approximately 1,500 individuals.

Results

Prevalence and incidence of SMIs is not evenly distributed in Wales. Increased prevalence and incidence of SMIs occur in more deprived and urban areas. Such associations occur for both schizophrenia related disorders and bipolar disorder and in both the primary and secondary care cohorts.

Conclusion

These findings have implications for resource allocation, service configuration and access to services in deprived communities, as well as, for broader public health interventions addressing poverty, and social and environmental contexts.

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