

## Neighbourhood and mortality in severe mental illness



People with severe mental illness have higher mortality rates, culminating in about 20 years of lost life compared with that of the general population, and momentum is growing to reduce this inequality.<sup>1,2</sup> In the general population, neighbourhood social context is related to mortality, but whether such patterns also exist for people with severe mental illness has received little attention. Understanding this relationship could allow us to tailor social interventions for this distinctive population. The study by Jayati Das-Munshi and colleagues<sup>3</sup> in *The Lancet Psychiatry* represents a welcome step in that direction, linking higher neighbourhood ethnic density to lower mortality rates among people with severe mental illness from ethnic minority backgrounds. These results raise the intriguing possibility that factors associated with ethnic density might promote longevity among people with severe mental illness.

Their study was based on a large cohort of 18 201 people with severe mental illness, identified and followed with use of electronic health registers for mortality outcomes for a median of 6.36 years in an ethnically heterogeneous location in south London, UK. Using these data, Das-Munshi and colleagues had previously observed<sup>3</sup> that mortality rates were lower for some ethnic minority groups than for the white British population. In this study,<sup>3</sup> they extend those findings to show that neighbourhood-level ethnic density, defined as the proportion of the neighbourhood population who identified as ethnic minorities, modified this relationship. All-cause mortality was higher for ethnic minority groups in the least ethnically dense areas (adjusted relative risk 0.96, 95% CI 0.71–1.29) compared with that of ethnic minority groups in the most ethnically dense areas (0.52, 0.38–0.71), relative to the white British population rate. This difference appeared to be driven by natural rather than unnatural (eg, suicide) mortality.

These patterns were not confounded by neighbourhood-level urbanicity, social fragmentation, or deprivation, which were not associated with mortality in this cohort. This is somewhat surprising given that deprivation has been linked to higher mortality in the general population,<sup>4</sup> but might reflect high levels of deprivation within the study region (all neighbourhoods were in the top 40% of most deprived

areas in England), which could have attenuated these expected associations; this result echoes findings<sup>5</sup> for risk of psychotic disorders, which appears higher in south London than in other, less deprived areas, but does not vary within this area by deprivation.<sup>6</sup> Henceforth, we focus on the ethnic density result.

Ethnic density remains a somewhat elusive construct, the meaning of which and mechanisms through which it affects health are poorly understood. Ethnic density can be operationalised narrowly (own-group) or broadly (all ethnic minorities), and might have multiple meanings depending on other contextual factors, including migrant status, ethnic identity, and wider social contexts.<sup>7,8</sup> Despite these caveats, robust associations with mental health,<sup>9,10</sup> and occasionally with other health outcomes,<sup>7</sup> have been reported, generally in a protective direction.

How do these caveats affect the interpretation of the ethnic density results in this study? The main findings of Das-Munshi and colleagues were based on overall ethnic density for anyone whose self-ascribed ethnicity was black Caribbean, black African, south Asian, or Irish. Similar trends were observed independently in all groups except the Irish, possibly because this group's minority status was less visible. Such results provide a crucial signal for future investigations but, as the authors acknowledged, they are not fine-grained enough to identify the objective or the perceived sociocultural experiences aligned to ethnic density and identity that might shape mortality risk by ethnicity. It is also possible that these results partly reflect higher absolute mortality in white British people living in high ethnic density areas, perhaps driven by selection into such neighbourhoods<sup>10</sup> or by perceived social isolation.

Studies<sup>7</sup> that have tried to assess which dimensions of ethnic density are related to health outcomes have produced inconsistent results, and the mechanism might not be the same for all populations or outcomes. As with the authors, we think it is plausible that protection from social isolation is involved, as it has been associated with higher mortality in the general population<sup>11</sup> and is particularly salient in people with severe mental illness. This theory would also offer opportunities to investigate how other neighbourhood contexts—including social fragmentation, ethnic diversity, and ethnic segregation—



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are linked to social isolation and mortality in people with severe mental illness. We recommend that future longitudinal studies include such measures, both objective and, importantly, as perceived by the residents, as well as individual characteristics that could confound or interact with this social context. The rigorous study by Das-Munshi and colleagues paves the way for us to better understand how these complex contextual influences can shape mortality risk in people with severe mental illness from different ethnic groups.

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