## Effective interventions for homeless populations: the evidence remains unclear



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A wealth of evidence demonstrates the damaging long-term effects of homelessness on health. Homeless individuals are at higher risk of infections, traumatic injuries, and violence, and are more likely to have multimorbidities, disabilities, and to die young.1 The Organisation for Economic Co-operation and Development (OECD) estimate that at present, 1.9 million people across OECD countries are homeless.2 In the USA, on a single night in January, 2019, an estimated 567715 people were experiencing homelessness, representing an increase of 3% from 2018.3 Homelessness among people with children has risen substantially over the past decade: in England, families experiencing homelessness increased by 42% between 2010 and 2017, and in the USA, families with children represent around a third of the homeless population.<sup>2</sup>

The damaging long-term effects of homelessness on the health of children, which include physical changes in brain structure, negative educational outcomes, and adverse long-term social and psychological outcomes, are stark.4-7 Strong evidence suggests that tackling poverty through increasing income and good quality housing are effective ways to achieve multiple positive health outcomes across the life course.8,9 However, questions remain about the impact of specific interventions on health and wellbeing-eq, which support structures are successful in ensuring permanent and stable housing for individuals and families experiencing homelessness and also have a positive impact on the health and wellbeing of those individuals? These questions require consideration within the scope of national political, welfare, and social systems.

The increasing levels of homelessness, not just in adults, but among families with young children, represent an important ongoing public health priority. As the transmission of coronavirus disease 2019 continues between people, the virus will have a substantial impact on individuals with underlying health conditions (representing a large proportion of the homeless population), thus it is imperative that countries consult the most up-to-date evidence to support vulnerable populations during the pandemic.<sup>10</sup>

In *The Lancet Public Health*, Tim Aubry and colleagues<sup>11</sup> present a systematic review of 15 studies on permanent supportive housing and ten studies on income assistance interventions for homeless populations in Canada and the USA. The review offers an important and timely contribution to the existing evidence base. The authors considered a wide range of outcomes to investigate the effect of permanent supportive housing and income assistance interventions for people experiencing homelessness, including housing stability, mental health, quality of life, substance use, hospital admission, employment, and earned income.

Although the number of original studies included was low, the authors used high quality methods to synthesise the evidence, and their findings suggest that permanent supportive housing is effective at maintaining stable housing for all age groups and for participants with a variety of support needs. Permanent supportive housing interventions increased long-term (6 year) housing stability for participants with moderate support needs (rate ratio [RR] 1·13 [95% CI 1·01–1·26]) and high support needs (RR 1·42 [1·19–1·69]) when compared with usual care. Results of a meta-analysis showed that at 2 years, permanent supportive housing resulted in more participants in stable housing than in usual services (odds ratio 3·58, 95% CI 2·36–5·43).

However, permanent supportive housing had no measurable effect on the severity of psychiatric symptoms when compared with usual services, unless it was offered with additional services, such as integrated on site case management or assertive community treatment services. Assessment of quality-of-life outcomes, substance use, and hospital admission showed that permanent supportive housing had short-term effects, but no long-term effects were observed. Data on income and employment outcomes were scarce, thus the impact of permanent supportive housing on these outcomes could not be assessed.

The findings for income assistance interventions were similar to those for permanent supportive housing, however the evidence is harder to synthesise. Five types of income assistance interventions were identified: housing subsidies, assistance finding housing and rental

supplements, financial education, compensated work therapy, and individual placement and support. Housing subsidies and assistance finding housing and rentals had positive effects on housing stability. Income assistance interventions had no long-term benefits for other health and wellbeing outcomes.

Aubry and colleagues' review highlights many uncertainties and important issues regarding the synthesis of available data, which must be considered at the international level. First, measuring levels of homelessness accurately and consistently over time is crucial to guide public policy, to track the impact of interventions on stable housing, health, and wellbeing outcomes, and to facilitate international comparisons. To accomplish this successfully, a unified definition of homelessness and standardised methods to measure experiences of homelessness internationally are required. Second, substantial heterogeneity was identified between studies in terms of design, intervention models, usual care models, and outcome measures, with many studies at high risk of bias, which makes it difficult to form clear conclusions to guide policy. Third, the paucity of data on health and wellbeing outcomes might be a result of the short follow-up of the included studies: the longest follow-up was 6 years in a single study. Importantly, the evidence is scarce. It is imperative that grant bodies and researchers consider the long-term health outcomes of homelessness interventions, because a time lag is often observed between the implementation of these types of intervention and any observable health effects.

declare no competing interests.

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