**Invited Editorial**

**Homelessness: a “cause of the causes” of cardiovascular disease?**

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**To accompany:** *Al-Shakarchi et al. Cardiovascular disease in homeless versus housed individuals: Systematic review and meta-analysis*

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Homelessness is a global crisis which has increased at an alarming rate over the last decade; worldwide it is estimated that nearly 1.6 billion people have inadequate shelter, resulting in the United Nations announcing its first-ever resolution on homelessness on 19th February 2020.1 In the current issue, a systematic review and meta-analysis shines the spotlight on homelessness and cardiovascular disease, reporting that homeless people have an almost three-fold higher risk of cardiovascular disease and greater risk of death from cardiovascular causes compared to housed individuals.2 This review also highlights the absence of any specific care pathways or interventions to manage cardiovascular disease in this at-risk population.2

Unfortunately, there is no global definition of homelessness and consequently the true prevalence of the problem is unknown. On the streets of every city homelessness is evident, with people ‘sleeping rough’ but this is just the tip of the iceberg; many homeless people are what is termed the ‘hidden homeless’- people who do not have a home of their own but are ‘sofa-surfers’, moving between friends and family, or surviving in temporary accommodation.3

Homelessness is a complex, multifactorial problem and the reasons for this are numerous and each individual experience is unique. Marriage breakdown, bereavement, poverty, traumatic life experiences, domestic violence, addiction, imprisonment, and mental health problems are common causes, and austerity has worsened the homelessness situation.3 Although the COVID-19 pandemic has led to many ‘rough sleepers’ being re-housed this may not be a sustainable solution and the sequelae of the pandemic (rent and mortgage arrears, unemployment and mental health problems) may further increase homelessness.

Homelessness significantly increases the risk of very premature mortality; the average age at death for a homeless person in England and Wales in 2018 was 45 years for men and younger among women at 43 years, compared to the average for the general population in 2018 of 76 and 81 years for men and women, respectively;4 – a staggering 30+ fewer years of life if you do not have a home.

**Homelessness and cardiovascular disease**

Faced with homelessness and the daily struggle to fulfil basic needs, health and prevention of non-communicable chronic diseases such as cardiovascular disease, are unlikely to be a priority for individuals. Traditional risk factors for cardiovascular disease, such as smoking are more common among the homeless, and hypertension and diabetes mellitus may go undetected and undiagnosed and where known, are unlikely to be appropriately managed, given the challenges of glycaemic control in the context of homelessness. In addition, limited and often unhealthy dietary options with inadequate nutritional benefit, excessive alcohol intake, and illicit drug use, which are more prevalent in homeless populations contribute to the development of cardiovascular disease.5 Further, the persistent stress associated with homelessness, absence of basic needs (food, shelter and clothing), threats to personal security, and sub-optimal sleep duration and quality, contributes to the increased risk of incident CVD. Mental health problems, including depression, anxiety, and post-traumatic stress disorder are highly prevalent among homeless populations, with approximately one-quarter suffering from severe chronic mental health disorders such as bipolar disorder, schizophrenia, and severe depression.6 Mental health issues can obfuscate matters resulting in decreased likelihood of reporting symptoms and seeking medical care, attendance at healthcare appointments, and adhere to medication regimens. Further, many psychotropic drugs can trigger or intensify risk factors for cardiovascular disease, such as obesity, dyslipidaemia, and diabetes.

In addition to the myriad of problems facing the homeless, significant healthcare system barriers exist, which may preclude this population. Access to healthcare is limited; most homeless people do not have a designated primary care/family physician and are known to experience barriers to GP registration.7 The management of chronic diseases, such as cardiovascular disease, usually requires life-long medication and routine follow-up, with some continuity of care; tracing or contacting people with no fixed address is challenging and obtaining medication may be difficult, particularly the financial burden of prescriptions and medication may be stolen which impacts ability to adhere. Further, many homeless people do not consult due to the stigma and discrimination of healthcare professionals, resulting from past experiences.8, 9 Consequently, homeless people are less likely to seek medical attention and may only do so when in crisis or at advanced stages of the disease.

**Addressing the problem of chronic disease management among the homeless**

The systematic review2 highlights the lack of attention to date on the burden of chronic diseases and their management among the homeless population and the dearth of information to inform policy and clinical guidelines. Although the current burden of cardiovascular disease among homeless people is excessive, it remains ill-defined due to lack of systematic data collection and is limited to a few studies predominantly conducted in North America and Europe (Sweden, Scotland, Finland, Poland, The Netherlands).2 We need to gain a better understanding of the magnitude and types of cardiovascular disease among the homeless; the specific barriers to healthcare faced by homeless people; and identify effective models of care and adapt/tailor these into current cardiovascular disease services and existing homeless services.

One important tangible difference healthcare professionals can implement immediately is to treat everyone with the same level of professionalism and compassion and not discriminate or stigmatise people who are homeless. Provision of appropriate and stable housing is a must but this alone will not solve the problem; support with mental health issues and interventions to address addiction (smoking, drugs, alcohol, and gambling) and poverty are paramount. Interdisciplinary working, with greater integration between mental health services and primary and secondary care, and housing teams are advocated.10, 11 Homelessness, is a “cause of the causes”12 and deserves special attention, for both treatment and prevention of cardiovascular disease.

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