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## Human health: is it who you are or where you live?

Urbanisation is one of the leading global trends of the 21st century and the UN predicts that seven in ten people will live in urban areas by 2050.<sup>1</sup> With hasty global urbanisation, the importance of understanding relationships between environment, human health, and wellbeing is being increasingly recognised. Urban advance offers many opportunities, including access to better health care; however, this growth is also associated with many emerging environment and health hazards. Over the past decades, urbanisation and subsequent changes in our living standards, lifestyles, and dietary patterns have been suggested to be associated with different exposures and the risk of disease.<sup>2</sup>

An increasing number of studies are investigating the effect of urban density and land-use mix on health gains, including reduced levels of obesity, and aim to identify types of neighbourhoods or characteristics of neighbourhoods that will promote health benefits.<sup>3</sup> However, uncertainty regarding the effect of urbanisation on obesity remains due to discrepancies in conceptual and methodological approaches in urban definitions. In this issue of *The Lancet Planetary Health*, Chinmoy Sarkar and colleagues<sup>4</sup> report their findings on the association between adiposity and residential density using objective measures of the built environment. In a large and diverse population in the UK, they provide evidence for a curvilinear dose–response relationship indicating inflexion points at 1800 and 3200 residential units per km<sup>2</sup>. Findings were consistent across measures of adiposity, with stronger associations being found for people who were female, younger, and accumulating higher levels of physical activity.<sup>4</sup> This beneficial urban environment is particularly important because, irrespective of geographical location, residential density seems to be associated with decreased levels of obesity.<sup>5</sup> This association suggests that high-density areas can provide and support increased levels of physical activity because they have nearby destinations that support walking.<sup>6</sup> Taken together these findings inform policies and practices aiming to create healthier cities through optimisation of urban planning and built environment design and to reduce health expenses by decreasing urban detrimental exposures.

Unfortunately, the urban neighbourhood effect might not be always beneficial for the obesity risk.

First, the increased urbanisation associated with high residential density, street intersections, and mixed land-use, together with low physical activity, increases reliance on foods that are often highly processed and containing high levels of salt, sugar, and fat.<sup>7–9</sup> Second, the complex interaction between human beings and urbanisation is dependent, not only on individual determinants and behaviours such as gender, age, social or economic resources, and lifestyle, but also on urbanisation landscapes, including air pollution, handiness of green areas and recreational facilities, neighbourhood safety, and opportunities for mobility and physical activity.<sup>10,11</sup> Therefore, to be effective in promoting health and healthy behaviour, public health interventions have to address not only individual characteristics but also the physical and social environment.<sup>1</sup>

The complexity of the linkages between urbanisation, environmental change, and human health and wellbeing requires a systems approach towards these factors. The study by Sarkar and colleagues<sup>4</sup> provides us with an improved understating of how the urban environment and land use can affect a complex chronic disease such as obesity. In fact, the rewiring of public health and urban planning is an opportunity to understand the effect of urbanisation and many other urban exposures on health, providing information to build up successful community-based disease prevention efforts. Ultimately, it is not only who you are, but also, and mostly, where and how you live that affects your health.

\**Inês Paciência, André Moreira*

Institute of Public Health (IP, AM), Faculty of Medicine (AM), and Faculty of Nutrition and Food Sciences (AM), University of Porto, Porto, Portugal; and Institute of Mechanical Engineering and Industrial Management, Porto 4200-465, Portugal (IP)  
inespaciencia@gmail.com

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