

Urban Planetary Health



A Scoping Review



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The climate crisis is increasingly understood as a health crisis, particularly relevant to cities, which accelerate health and environmental risks, while also providing opportunity for innovative solutions to these challenges. Creating healthy cities has thus gained momentum to leverage urban potential by intersecting health with all areas of urban life to cope with multiple crises. In line with these aspirations, 'Urban Planetary Health' (UPH) is a newly emerging concept to address the interconnections between human and environmental health in the context of urban environments. It understands 'the city' to be a key stage in which these relations take place, and thus an essential site for these relations to be managed and transformed (Hancock et al., 2017). To better understand the concept of UPH the following scoping review will outline the research agenda, focus and direction of this newly emerging notion, beginning with a brief overview of the method used for the review, before turning to outline its primary findings.

We used a scoping review method (Arksey and O'Malley, 2005) to map relevant literature in the field of Urban Planetary Health. Three iterative searches were inputted into Google Scholar ('urban planetary health'; 'planetary health' AND 'cities'; and 'urban' AND 'human health'). The searches generated 30, 17000 and 4460000 results respectively. The first 100 results from each search were sampled, with a total of 30 extracted to be read and analysed in depth. The systematic reading of the selected references followed standardised questions to derive information across the research. Although the scope for analysis is far broader, the following discussion will centre on the three primary questions of interest for the review:

- 1) How do the authors define UPH?;
- 2) Which major topics are covered in the research?; and
- 3) What do the authors identify as research gaps (if any)?.

Each will be discussed in turn.

Firstly, we determined how the authors define UPH. Whilst planetary health is occasionally defined, urban planetary health is referred to only implicitly by using both planetary health and urban as explanatory variables. Temporality is crucial here as the use of these terms is dynamic with time. Beginning with de Hollander (2003) and Jackson (2003), the earliest 8 articles reviewed make no reference to planetary health, although similar concepts are used (e.g., Bentley (2014) uses 'ecological public health'). Capon (2017) then makes the first explicit use of planetary health. From 2017 onward articles begin consistently using and occasionally defining planetary health. Here the concept is theorised as a valuable approach in tackling the challenges of the next century (Myers et al., 2021; Hancock, 2021). Three articles utilise urban planetary health specifically, but still without clear definitions (Pineo et al., 2020; Patz and Siri, 2021; Scally et al., 2021). Perhaps associated to its recent emergence, definitions of UPH remain vague throughout the reviewed literature.

Aiming at establishing the major topic areas covered in the literature on UPH, we discovered that most articles are concerned with broad research or policy agendas. This is illustrated by the lack of spatial focus seen in the majority of papers. Rather than speaking to a specific place, authors discuss issues of policy and research without spatial grounding or address UPH on a global scale (e.g., Ebi et al., 2020). Similarly, when analysing the methodologies used in this body of work, the majority rely on literature reviews rather than empirical work, and subsequently adopt a conceptual rather than grounded evidence-based approach. Whilst some exceptions to this trend exist (Giles-Corti et al., 2016; Belesova et al., 2018; Gabrys, 2020; French et al., 2021), the majority of reviewed articles investigates the interactions between policy and research, the limitations of these fields, and their role in establishing a greener and healthier planet.



Finally, research gaps were identified regarding both content and approach. Many authors call for further research on the relationship between the urban environment and public health (Jackson, 2003; Barton et al., 2009; Prior et al., 2018; Gabrys, 2020; French et al., 2021; Tonne et al., 2021). Interestingly this gap appears to be consistent across the last two decades, indicating the persistent (and likely continuing) need for greater focus on these relations. Additionally, research lacks a focus on low- or middle-income countries (Friel et al., 2011; Giles-Corti, 2016), which would need to be addressed in order for UPH to have global relevance. The reviewed literature also calls for focusing on interdisciplinary or integrated understanding of the subject (Tzoulas et al., 2007; Thomas, 2016; Grant et al., 2017; Brousselle and McDavid, 2021; de Sa et al., 2021; and Grant et al., 2022). Relatedly, policy emerges as a theme for further investigation. Particularly the interactions between research and policy are understood as essential, and warrant further academic attention (Black et al., 2018; Wong, 2020; Scally et al., 2021; Crane et al., 2021). For instance, the concept of 'upstreamism' is highlighted, calling for concentrated attention on decision-makers (Black et al., 2018; Scally, 2021; Black, 2021). Finally, the most recent paper reviewed (Grant, 2023) proposes the use of Barton and Grant's (2006) Health Map as a conceptual tool to understand relations between urban environments and public health. This also poses a new research gap to explore in coming years.

To conclude, Urban Planetary Health has undoubted value as we look to understand and manage the environmental, urban and health challenges of the next decades. Whilst a relatively simple term, its use would benefit from targeted definition and use. In fact, the full potential of UPH will be most visible and prime for evaluation when its use is grounded, away from the abstract, in the everyday. Its use in academia, policy and urban practices over the next decade then requires regular critique and analysis. However, the progress already made by those theorising either explicitly or implicitly on UPH is significant and identifies the concept as a valuable tool for understanding the challenges of the 21st century.

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