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Urban Health Paradigms



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Synonyms

[Urban health epistemic communities](#); [Urban health ideas](#); [Urban health policy ontologies](#)

Definition

A *paradigm* is a coherent body of work that shares a standard set of concepts, theories, methods, and instruments that researchers and scientists within the paradigm take for granted (Kuhn 1962). It is also commonly used as an epistemological term

that stands for the disciplinary frames, beliefs, ideas, norms, ontological positions, or “thought patterns” in disciplines and sectors (Seel 2012).

Urban health is a field of research, practice, and policy that addresses the health of people that is impacted by the physical and social environments of the urban setting (Wuerzer 2014).

Urban health paradigms are distinct approaches to understanding and addressing urban health issues that manifest from the underlying ideations and beliefs on how the problem is conceptualized, the best methodologies to create knowledge on the issue and the optimal solutions to address them.

Transdisciplinary research is a type of cross-disciplinary research that aims for a greater degree of integration than multidisciplinary or interdisciplinary research. Two or more disciplines transfer and transcend knowledge and research methods and create coherent knowledge without any boundaries between disciplines (Lawrence 2021).

Policy ideas are causal beliefs about the relationships between things and people in the world that guide people’s decisions and actions (Béland and Cox 2010).

Introduction

Urban health is a complex field of research and action that requires intersectoral collaboration and multidisciplinary methodologies. Therefore, researchers and policy actors that study and

address urban health issues come from a wide range of disciplines, sectors, and trades. This diversity of backgrounds invites multiple conceptual, theoretical, methodological, and instrumental views on urban health. These views, or paradigms, are reflected in the language and terminologies researchers and actors use that are frequently regarded as barriers to intersectoral action. More importantly, differing paradigms shape the underlying beliefs about which urban health problems are important and worth addressing and their appropriate and preferred solutions. The four urban health paradigms that are presented in this entry illustrate the different foundational positions of urban health researchers and policy actors. Each of these urban health paradigms supports a distinct set of research traditions and policy ideas.

The Need to Understand Urban Health Paradigms

The conceptual arena around cities and health is occupied by many different concepts, approaches, ideas, and theories. This is inherent to the nature of the field. But not all of these freely pervade all others. There are a few hermetic paradigms that are conceptually and practically exclusive. Understanding urban health paradigms entails more than the identification of which paradigms exist. It is more important to articulate how the paradigms differ in their views. In doing so, participants can acknowledge the views and begin to search for coherence in understanding knowledge produced from differing urban health paradigms. As a result, scientists and policy actors can interpret knowledge produced from one paradigm, make sense of the paradoxes between disciplinary knowledge, and ultimately seek strategies to combine or connect with the coexisting paradigms.

Recognizing urban health paradigms is essential in two key areas to promote urban health – (a) facilitating transdisciplinary knowledge in research and practice and (b) influencing the policy process. Transdisciplinary approaches help establish better urban health research and policy. Urban health is a complex field, and each

disciplinary interpretation focuses on specific characteristics of the object of study. The increasing availability and diversity of empirical knowledge on urban health ironically creates larger uncertainty on the issue (Lawrence and Gatzweiler 2017). The conflicting meanings and values of data reduce the capability of humans to act on the information that they do not necessarily understand. The objective of transdisciplinarity is to preserve the different realities and confront them, and thus the goal is not to search for consensus but to search for coherence (Ramadier 2004). Understanding the grounding and views of different urban health paradigms not only allows us to reinterpret the information, but furthermore leads to opportunities to develop transdisciplinary research programs.

Furthermore, paradigms are the foundations for ideas and beliefs that are central in policymaking. Policymaking is a process of conflict and negotiation over policy ideas (Leftwich 2015). In fact, the rules and norms of the decision-making structures that influence urban health processes and outcomes are ideas that have been institutionalized (Cairney 2012). To influence policy change, policy actors search for other policy actors who share their beliefs and aspire to form like-minded coalitions (Jenkins-Smith et al. 2018). Because deep core beliefs are foundational and less subject to change, policy actors generally target incremental change in lower-level belief systems that define the preferred policy instruments and settings while maintaining the overall policy paradigm. To achieve this, policy actors frame their policy proposals within the conceptual understanding of others to gain support (Kingdon 1984). Having a clear understanding of existing urban health paradigms can assist policy actors to frame their ideas within the language and worldviews of different paradigms.

Four Types of Urban Health Paradigms

Four distinctive paradigms currently coexist in urban health scholarship and policy – the “*medical-industrial city*,” “*urban health science*,” “*healthy built environments*,” and “*health social*

movement.” While some overlaps and similarities can be found, each one of these is characterized by their prominent beliefs on:

- Which urban health issues are more important (a *conceptual gaze*)
- What causes these urban health issues (*theoretical frameworks*)
- Which data collection or analytical method would best measure and seek information (*methodologies*)
- Which solutions effectively resolve the prioritized issues (*instrumental dimensions*)

Medical-Industrial City

The “*medical-industrial city*” paradigm is driven by business, industry, and the government generally in the healthcare, construction, and technology sectors where healthcare infrastructure and services are treated as commodities to be invested in for urban change. Views of this paradigm align with neoliberal principles and the urban growth machine theory (Molotch 1976). The concept of health is viewed in a biomedical, individualistic, pathogenic model and coupled with the image of economic prosperity in the form of livability and healthy lifestyles. Actors in this paradigm include place entrepreneurs, businesses, and industries that profit from such development, politicians, universities, media, and corporate capitalists. This view is less active in scientific research, but often is the dominant position in current urban development practices such as large-scale healthcare industry- and infrastructure-centered urban development or smart city (for health) initiatives.

Urban Health Science

The “*urban health science*” paradigm emphasizes epidemiological and classic Cartesian methodologies to empirically analyze the complex causal associations between the urban environment and health. The urban environment is viewed as a critical layer in the multilevel framework of the social determinants of health and the urban health system is a complex network of multidirectional causal relationships, feedback loops, and unintended consequences (Ettman et al. 2019; Rydin et al. 2012). Evidence is generally

produced through the measurement and quantification of the urban condition and its health impacts and is critical when developing solutions to improve health. Therefore, recommended solutions are generally technocratic and usually propose lists of “evidence-based” interventions or best buys.

Healthy Built Environment

The “*healthy built environment*” paradigm sets the (re-)integration of health as a main objective for spatial planning. Ideas in this paradigm focus on transforming the sets of procedures, institutions, and regulations of the urban planning system (Barton et al. 2015; Kent et al. 2018). Researchers and policy actors following this paradigm develop and propose codes or guidelines as criteria or benchmarks for urban planning projects to ensure health is considered in the projects. Rigorous quantitative methods are regarded as high-quality evidence, but proponents of this paradigm also advocate for more participatory and comprehensive methods to understand the complexity of the issues. Healthy urban development checklists and healthy urban planning guidelines are examples following this paradigm (UN-HABITAT and World Health Organization 2020).

Health Social Movement

The “*health social movement*” paradigm supports a “value-based” approach to health promotion that values principles such as health equity and empowerment in identifying and solving of urban health issues (Brown and Fee 2014; de Leeuw and Simos 2017). Views of this paradigm align with the definition and principles of health promotion as outlined in the Ottawa Charter for Health Promotion (World Health Organisation 1986). Ideally driven by the empowered community, solutions focus both within (in community-driven action) and outward (in mobilizing for policy and systems change). According to the perspectives of this paradigm, a healthy city is not defined by a set of standards, but rather a healthy city is one that commits to healthy city values and continuously creating supportive environments for health. The WHO Healthy Cities movement is an example that follows the principles of this paradigm (Table 1).

Urban Health Paradigms, Table 1 Four urban health paradigms (summary)

Four urban health paradigms				
	Medical-industrial city	Urban health science	Healthy built environment	Health social movement
View on urban health	Biomedical and individualistic approach to health and illness. Healthcare infrastructure and health-related technologies influence health outcomes	Focus on risk factors that lead to illness or disease outcomes. The urban built environment is a critical layer in the multi-determinant model	Focus on health-promoting lifestyles, wellbeing, quality of life, or flourishing. Elements of urban planning process and governance structure impact these health outcomes	Socio-ecological view on health and an explicit focus on health equity. The sociopolitical factors underlying the urban governance systems are the main drivers of urban health
Urban health solutions	Investment in healthcare infrastructure as drivers of economic growth	Expert-led empirical evidence-based interventions and technological solutions	Influencing the planning system and urban planning regulations and processes	Value-driven community empowerment approach to transform the urban environment
Examples	Health and innovation precincts models for urban development	Urban health indicators, Partnership for Healthy Cities (Bloomberg Foundation)	Healthy urban planning principles and guidelines	WHO Healthy Cities movement

Conclusion

The growing global challenges we face today influence a myriad of complex urban and regional issues that call for multitude of responses across all disciplines, sectors, regions, and scales. Criticisms that the responses have been inadequate or fragmented cannot be reconciled unless we identify where and how the similarities and differences occur. Without the recognition of the underlying foundational beliefs that form different positions in addressing urban issues, responses will remain fragmented, or collaboration efforts will be at best superficial. Articulating the paradigms to address conflicts or paradoxes between different worldviews is the first step in reconstructing for transdisciplinary evidence and decision-making that result in better and more equitable economic, environmental, and social consequences.

Understanding urban health paradigms provides opportunities to facilitate transdisciplinary urban, peri-urban, and regional health research and to influence land use, transport, and other planning policies that impact health. The different urban health paradigms that exist are

differentiated by the conceptual, theoretical, methodological, and instrumental beliefs on how cities create and enhance health. Researchers, practitioners, and policy actors can use the urban health paradigms as a framework to interpret and apply knowledge produced across diverse belief systems. Instead of searching for unity or consensus, approaches to improve urban health should seek coherence in the application of knowledge, methodologies, and solutions that transcend urban health paradigms.

Cross-References

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