Generating global political priority for urban health: the role of the urban health epistemic community

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Abstract

Over the past decade there has been much discussion of the challenges posed by rapid urbanization in the developing world; yet the health of the urban poor, and especially those residing in lowand middle-income countries, continues to receive little political priority in most developing countries and at the global level. This research applies social science scholarship and a public policy analytical framework to assess the factors that have challenged efforts to make health in urban poor settings a priority. We conducted 19 semi-structured phone interviews with key urban health proponents and experts representing agencies that shape opinions and manage resources in global health. We also conducted a literature review, which included published scholarly literature and reports from organizations involved in urban health provision and advocacy. Utilizing a process-tracing method, we triangulated among these sources of data to create a historical narrative and analyse the factors that shape the global level of attention to and resources for urban health. The urban health agenda continues to be challenged by six factors, three of which concern the political context or characteristics of the issue: long-standing competition with the dominant development agenda that is rural health oriented; limited data and measurement tools that can effectively gauge the extent of the problem; and lack of evidence on how to best to address the issue. The other three factors are directly under the control of the urban health community: the community's ineffective governance; little common understanding among its members of the problem and how to address it; and an unconvincing framing of the issue to the public. The study offers suggestions as to what advocates can do to secure greater attention and resources in order to help address the health needs of the urban poor.

Keywords: Agenda setting, developing countries, development, governance, health policy, slums, Urban health

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Key Messages

- Urban health has been neglected globally, and especially in most developing countries. This is surprising given the
 rapid growth of urban—and especially urban poor—populations in low-income countries, and the health inequalities
 that exist within these urban settings.
- The advancement of the urban health agenda is challenged by long-standing competition with the dominant development agenda that is rural health oriented, lack of data—and especially disaggregated data—needed to better understand the magnitude and severity of the urban health challenge, and the lack of evidence on how best to address the health needs of the urban poor.
- The agenda has also been hindered by the global urban health policy community's ineffective governance, little member consensus surrounding the problem and how to address it, and unconvincing framing of the issue.
- Global visibility and political priority for urban health is shaped by the mutual constitution of structural (which concerns the existing patterns or conditions in which behaviour or change occurs) and agentic (which relates to an actor's capacity to shape behaviour or change) factors, and there are several opportunities for the urban health policy community to advance the issue in the future.

Introduction

There exist vast inequalities in health outcomes and service coverage between the poorest and wealthiest individuals residing in the urban centres of many low- and middle-income countries (LMICs) (UN-Habitat 2016a). Further, in a majority of LMICs, inequalities in urban areas generally exceed those in rural areas (UN-Habitat 2006; Addo et al. 2007; Van de Poel et al. 2007; Uthman 2009). Sometimes indicators among the urban poor in many countries are comparable to or worse than the rural average: the probability of dying between the ages of one and five is 63% higher in the slum communities of Nairobi than in rural Kenya (APHRC 2002). Also, the slums in Bangladesh, Ecuador, Brazil, Haiti and Philippines have higher infant and neonatal mortality rates than those in rural communities (Ezeh et al. 2016). City dwellers also suffer higher rates of road traffic injuries (WHO 2009) and some infectious diseases such as tuberculosis, which disproportionally affect poor urban populations.

Though global level discussion on the challenges posed by rapid urbanization in LMICs has increased over the last decade, health inequalities among the urban poor and slum dwellers continue to receive little global attention or resources (Shetty 2011; Humphreys and Gregory 2012; Ezeh et al. 2016). We see evidence of this in the disproportionate programming that occurs in rural communities, development organizations' and funders' acceptance of the idea of a blanket 'urban advantage' with regard to health, and the little attention that slum health receives in scholarly literature (only 2.8% of studies of LMICs are based in a slum area) (Rydin et al. 2012; Ezeh et al. 2016). We also see this reflected in the global indicators on poverty, water and sanitation, which do not account for the realities of urban poor contexts (i.e. high-population density and cost of living) (Satterthwaite 2003). At national levels, the issue's insufficient prioritization is evident in the limited presence of public sector health facilities and services in many urban poor and slum settings (Matthews et al. 2010; Fotso and Mukiira 2012; Adams et al. 2015), as well as in the 'invisibility and neglect' of slum dwellers who bore a disproportionate disease burden in the recent Ebola epidemic (Snyder et al. 2014).

Around the turn of the 21st century, an emergent group of urban specialists, economists and champions in the development community began trying to bring global attention to the health of urban populations, particularly the poor in LMICs. In this article, we refer to this group of experts as the urban health epistemic community (urban health community), given their efforts to raise the issue's policy discourse through their knowledge expertise (Haas 1992).

This study examines the challenges that the urban health community faces in garnering attention and resources at the global level for the health of the urban poor and slum dwellers in LMICs. We first describe the epistemic community and policy process scholarship that grounds this study, present the policy framework that we draw on, and describe the study's methodology. In the results section, we provide a historical narrative of urban health's prioritization at the global level. We then consider the factors that have challenged the advancement of the issue on global agendas, with particular focus on the dynamics directly controlled by the urban health community, as well as those concerning the policy environment and the characteristics of the issue itself. In the discussion, we examine the indications of the urban health epistemic community's emergence in the early 2000s, consider how the identified challenges interact in shaping the issue's place on the global agenda, and identify several opportunities for advocates to raise global political priority for urban health.

Theoretical background

The policy scholarship has increasingly grappled with why certain issues gain attention on agendas (Kingdon 2003; Shiffman and Smith 2007; Baumgartner and Jones 2010) and there have been a number of studies that examine the role of policy networks in shaping the place of particular health issues on global agendas (i.e. Hafner and Shiffman 2013; Dalglish et al 2015; Shawar et al 2015; Shiffman et al. 2016; Shawar and Shiffman 2017; Shiffman 2017). Despite this, little is known about the role of epistemic communities during the health agenda-setting process, and specifically what shapes their effectiveness in raising the status of their issues (Cross 2012). Epistemic community scholarship primarily attributes the actor's success in influencing policy to structural factors (existing rules and social arrangements) concerning the issue's characteristics and the policy environment. Specifically, this scholarship contends that epistemic communities are more likely to play a role in advancing an issue on agendas when there is: (1) uncertainty (i.e. a complex issue is more likely to increase policy-maker reliance on an epistemic community's expertise) and (2) presence of a crisis or shock (i.e. instability prompts policy-makers to seek out epistemic community expertise) (Haas 1992). In contrast, epistemic community scholarship insufficiently examines the agentic factors-emerging from an actor's autonomy and ability to act freely-that may play a role: the internal dynamics concerning epistemic community composition, organization, cohesion and issue framing strategy (Shawar 2016).

Table 1 Shiffman and Smith policy framework

	Description	Factors shaping political priority
Actor power	The strength of the individ- uals and organizations concerned with the issue	(1) Policy community cohesion: the degree of coalescence among the network of individ- uals and organizations that are centrally involved with the issue at the global level
		(2) Leadership: the presence of individuals capable of uniting the policy community and acknowledged as particularly strong champions for the cause
		(3) Guiding institutions: the effectiveness of organizations or coordinating mechanisms with a mandate to lead the initiative
		(4) Civil society mobilization: the extent to which grassroots organizations have mobi- lized to press international and national political authorities to address the issue at the global level
Ideas	The ways in which those involved with the issue understand and portray it	(5) Internal frame : the degree to which the policy community agrees on the definition of, causes of, and solutions to the problem
		(6) External frame: public portrayals of the issue in ways that resonate with external audi- ences, especially the political leaders who control resources
Political contexts	The environments in which actors operate	(7) Policy windows: political moments when global conditions align favourably for an issue, presenting opportunities for advocates to influence decision makers
		(8) Global governance structure: the degree to which norms and institutions operating in a sector provide a platform for effective collective action
Issue characteristics	Features of the problem	(9) Credible indicators: clear measures that show the severity of the problem and that can be used to monitor progress
		(10) Severity: the size of the burden relative to other problems, as indicated by objective measures such as mortality levels
		(11) Effective interventions: the extent to which proposed means of addressing the prob- lem are clearly explained, cost-effective, backed by scientific evidence, simple to imple- ment, and inexpensive

^aReproduced from Shiffman and Smith (2007).

We draw on the work of constructivist scholarship to examine the structural and agentic factors that shape an issue's agenda status, and deepen understanding around the role that health epistemic communities play in advancing their issue. Constructivism advances that the nature of international relations is historically and socially constructed, placing emphasis on the power of shared ideas over given material forces-a hallmark of neoliberalism and neorealism-in explaining international politics. Constructivist scholars emphasizing structural factors, known as sociological institutionalists, highlight the role of existing rules and patterned social arrangements in advantaging some issues over others (Meyer et al. 1997; Schofer et al. 2012). They examine how culture, international institutions, and other aspects of a structured world shape the identities and behaviours of actors worldwide. Constructivist scholars advancing agentic constructivism, on the other hand, tend to examine factors concerning an actor's autonomy (Sikkink 2011). They view proponents' behaviours, strategies and decisions as the primary influence on which issues policy-makers consider and advance. Another group of scholars, which endorses the theory of structuration, examines both structural and agentic factors without prioritizing either (Giddens 1984; Wendt 1987).

Methods

Policy framework

We draw on the Shiffman and Smith (2007) policy framework (Table 1), which describes both agentic and structural determinants for the political priority of global health initiatives, to analyse factors that shape global priority for the health of the urban poor. Global political priority, our main dependent variable, as defined by Shiffman and Smith (2007) is 'the degree to which international and national political leaders actively give attention to an issue, and back up that attention with the provision of financial, technical and

human resources that are commensurate with the severity of the issue'. The framework distinguishes 11 determinants of political priority for global initiatives and organizes these independent variables into four categories: (1) actor power (i.e. the strength of the urban health community engaged with the promotion of urban health in LMICs), (2) the power of ideas (i.e. how this community understands the issue and frames the problem to cultivate political support), (3) political contexts (i.e. the policy environments in which the community operates) and (4) issue characteristics (i.e. the severity of the problem, the extent to which credible indicators exist to demonstrate its severity, and the availability of effective interventions).

Qualitative policy analysis

In conducting the analysis, we employed a process tracing method (Beach and Pedersen 2013; Bennett and Checkel 2014), triangulating among several data sources, including 19 semi-structured interviews with individuals in major donor agencies, international development organizations and academic institutions (all institutional affiliations of each key respondent are listed in Table 2), as well as 191 documents, including peer-reviewed literature, organizational reports, and conference notes concerning the health of the urban poor in LMICs. Our aim was to reach theoretical saturation-the point at which all major themes have been identified and additional data is unlikely to reveal new information (Morse 2004). We realized that this was reached when multiple, unaffiliated respondents began answering the same questions in similar ways and no new additional information was uncovered (i.e. recalling a comparable progression of critical developments and identifying similar points of contention amongst policy community members). Based on the data collected, we created a historical narrative and conducted a thematic analysis (Bradley et al. 2007) to analyse factors shaping the issue's prioritization using the framework factors

Table 2 Urban health key informant organization affiliations

Key informant organization affiliations ^a				
Abt Associates				
Bill and Melinda Gates Foundation				
Bangladesh Rural Advancement Committee (BRAC)				
Children's Environments Research Group				
Columbia University				
Environment and Urbanization Journal				
International Centre for Diarrhoeal Disease Research, Bangladesh				
(icddr,b)				
International Institute for Environment and Development				
International Society for Urban Health (ISUH)				
Jhpiego				
Johns Hopkins University				
Journal of Urban Health				
Management Sciences for Health				
National Academy of Sciences Committee on Population				
The New School				
Princeton University				
Population Council				
Robert Wood Johnson Foundation				
Rockefeller Foundation				
Save the Children				
Slum Dwellers International				
State University of New York at Stony Brook				
University of California San Francisco				
University of North Carolina				
University of Washington				
United Nations				
United Nations Development Programme (UNDP)				
United States Agency for International Development (USAID)				
Urban Health Resource Centre				
Wilson Center				
World Bank				
World Health Organization (WHO)				

^aA number of key informants held more than one affiliation; all key informant affiliations are listed in this table.

(Table 1) as the initial codes. In reporting the interview data, we assigned each key informant a number, and listed their most prominent institutional affiliation type and country classification (Table 3). The panel details how the interviews, literature review and analysis were conducted. The study protocol underwent ethics review from the MidLands Independent Review Board, which granted it exempt status.

Panel: Literature review, interviews and analysis Literature review

We collected and reviewed peer-reviewed literature, organizational reports, and conference notes concerning the health of the urban poor in LMICs. In addition, we carried out archival research on the history of LMIC urban health initiatives among global level actors—including donors, development organizations, UN agencies, and non-governmental organizations (NGOs)—involved in health programming, service provision and/or advocacy. Excluding any sources published prior to 1970, we searched Google Scholar, PubMed, ProQuest, JSTOR and Global Health databases. We used the search terms 'urban health', 'slum health' and 'urban water and sanitation' in combination with 'assessment', 'developing countries', 'priority', 'policy', 'cost', 'burden', 'capacity' and 'cost effectiveness'. We restricted our search to articles

Key informant ID number	Primary affiliation type key-informant is most closely associated with ^a	Key informant location ^b
1	NGO	LMIC
2	International NGO	
3	Academic Institution	HIC
4	International NGO	LMIC
5	NGO	LMIC
6	International NGO	HIC
7	Academic Institution	HIC
8	International NGO	HIC
9	International NGO	LMIC
10	UN Agency	LMIC
11	International NGO	HIC
12	Foundation	HIC
13	International NGO	HIC
14	Academic Institution	HIC
15	NGO	LMIC
16	International NGO	HIC
17	International NGO	HIC
18	Bilateral Agency	HIC
19	International NGO	HIC

^aNGO, non-governmental organization; not for profit organization and independent from states and international governmental organizations.

International NGO, similar to NGO, but international in scope and has outposts around the world to deal with specific issues in many countries.

Academic Institution, educational institution, such as a university, dedicated to education and research.

^bHIC, high-income country; LMIC, low or middle income country.

in English that were associated with urban health issues in LMICs, and documents pertaining to the strategies, arguments, and policies that the urban health community considered or employed.

Key informant interviews

Between June and September 2013, we conducted 19 semi-structured phone interviews, lasting on average one hour, with individuals in major donor agencies, international development organizations, and academic institutions. All respondents were either considered experts in the area of urban health and/or nutrition that actively engage in policy discourse on the issue (members of the epistemic community), or representatives of major actors that shape opinions and/or manage resources in global health (some of whom were critical of the urban health agenda). We identified these individuals through our literature review, in consultation with an advisory committee within Save the Children, and by asking interviewees whom they considered to be most centrally involved in or critical of urban health work and advocacy. The interview questions (Supplementary Material) were openended and individualized depending on the individual's background and involvement in urban health. Thirty-one individuals from seven countries were contacted for an interview by e-mail. Those that accepted (61% response rate) were based in seven countries (Bangladesh, Brazil, India, Indonesia, South Africa, USA and UK) from both high-income countries (61%) and LMICs (37%) and from a broad range of organizations. In comparing key-informant respondents and non-respondents, we found no significant differences in the profile of these two groups. Most individuals working on the issue of urban health at the global level came from high-income countries, which is why more interviews were conducted with people from high-income countries than from LMICs.

Analysis

In conducting the analysis, we drew on social constructivist scholarship and utilized the Shiffman and Smith (2007) framework factors as the initial codes for our thematic analysis to analyse the factors shaping the urban health's global prioritization. We employed a process tracing method, triangulating among several data sources, corroborating information from interviews with written sources in order to assess causality, uncover social and political processes, and minimize bias. The first author is an independent researcher and not affiliated with the urban health policy community and the second author is employed by an organization involved in urban health policy and a technical specialist in the subject. Given the authors' positionality to the issue and to curtail possible bias and ensure historical accuracy, the analysis of the data was independently conducted by the first author and a draft of this article was sent to four individuals from various institutions engaged in global urban health efforts.

Results

Part I: historical overview

The following historical narrative outlines major developments concerning the advancement of the health of the urban poor and slum dwellers in LMICs on global agendas (Table 4). Major policy developments at national and subnational levels, as well as key developments outside the health sector, are critical to addressing the health needs of urban poor and excluded populations. However, these are largely omitted from the narrative, as a comprehensive analysis across all sectors and within countries were beyond the scope of this study.

1970-90 s: increased attention to the implications of global urbanization

Significant attention to urbanization at the global level began in the mid-1970s, during which the United Nations (UN) organized its first international conference dedicated to human settlements (Habitat I). This resulted in the Vancouver Action Plan (UN-Habitat 1976), which proposed global strategies to address and control the issues of urban growth. During this time, the United States Agency for International Development (USAID) began work on its first agency-wide policy to address urbanization in developing countries.

The first explicit focus on urban health by a major global institution did not occur until 1986, when the World Health Organization (WHO)—Europe initiated its Healthy Cities initiative. Initially launched in high-income countries, its primary goal was to ensure that health was high on the economic, social, and political agendas of city governments (Khosh-Chashm 1995). Beginning in 1994, LMICs used the strategies and resources that were attributed to the early achievements in high-income cities to begin their own programmes. However, the initiative never became a success in LMICs (Boonekamp *et al.* 1999; Harpham *et al.* 2001; Harpham 2009) because of programme instability and little commitment from LMIC public officials lacking resources to lead and sustain the project (Kenzer 2000).

In light of continued rapid urbanization and the lack of progress in addressing problems stemming from urban growth, the UN held a follow-up conference (Habitat II) in 1996 to establish new goals for the next millennium (UN-Habitat 1996). The resulting Habitat agenda and subsequent 2001 UN General Assembly adoption of *Declaration on Cities and Other Human Settlements in the New Millennium* focused on ensuring 'adequate shelter for all' and 'sustainable human settlements development in an urbanizing world'—representing a vague concern for addressing urban health at best (UN 2001).

Early-to mid-2000s: Emergence of urban health epistemic community and growing research interest in urban health

The launch of the Millennium Development Goals (MDGs) spurred world action on eight priority areas, including three goals on health and one on environmental sustainability, which included a target of significantly improving the lives of at least 100 million urban slum dwellers by the year 2020 (UN 2000). In 2002, a diverse community of professionals concerned with the lack of attention to and research on global urban health formed the International Society for Urban Health (ISUH), founded at the New York Academy of Medicine. ISUH's mission was to 'facilitate the exchange of perspectives, research methods and data on the study of health in urban areas and the effects of urbanization on health' (ISUH 2003). One of the organizers' described the group's formation:

There really wasn't a single body to enable us to have dialogue and to address the issues through research. [ISUH] came from a need that had no home. So, we created one (18).

A majority of the members were academics, representing a variety of disciplines, including urban planning, public health, policy sciences and the social sciences (Thomas *et al.* 2016). Participation in the International Conference on Urban Health (ICUH) grew over time and began attracting more practitioners, community organizers and public policy workers. Although ISUH focused on high-income countries initially, it actively sought to expand its inclusion of LMICs (I6, I7), strengthening linkages with LMIC-based organizations and networks with a focus on urban health (i.e. the African Population and Health Research Council (APHRC), the Bangladesh Urban Health Network, Eminence Associates for Social Development, and the Belo Horizonte Observatory for Urban Health).

The formation of ISUH coincided with increasing attention to the 'urban tipping point', a prediction that beginning in 2007, more of the world's population would be living in urban areas than rural (I7). One ISUH member noted how the impending demographic shift was critical to galvanizing momentum:

It proved to be a way of ... organizing and getting attention ... It was a marketing moment for those of us interested in urban health ... I think it sort of made it very plain that we can no longer afford to ignore the well-being of the urban population (I11).

In the early 2000s, two critical publications surfaced. The first was the *Population and Health Dynamics in Nairobi's Informal Settlements* report, which was based on a cross-sectional slum survey conducted by APHRC (2002). The report concluded that slum residents have worse health and social outcomes than their wealthier or rural area counterparts (APHRC 2012). The survey was the precursor to the 2002 Nairobi Urban Health and Demographic Surveillance System (NUHDSS), the first platform in a LMIC to research the inter-linkages between health and urban poverty (Kyobutungi *et al.* 2008; Ziraba *et al.* 2009; Emina *et al.* 2011; APHRC 2016).

The second publication was the US National Research Council's *Cities Transformed: Demographic Change and Its Implications in the Developing World*, which explored the implications of various urban contexts on multiple issues including health (National Research Council 2003). The book highlighted the scarcity of

Year	Event		
1970s-1990s:	Increased attention to the implications of global urbanization		
1970	USAID's Office of Urban Development, Bureau for Technical Assistance exists from 1970 until 1982; first agency-wide policy on		
	urbanization in developing countries.		
1976	Habitat I is the first UN conference dedicated to cities.		
	Vancouver Action Plan proposes global strategies to address and control the issues of urban growth.		
1986	WHO-Europe initiates Healthy Cities initiative.		
1992	The United Nations Conference on Environment and Development, chapter six of 'Agenda 21' concerns the protection and promo		
	tion of human health; one out of the five proposed programme areas is dedicated to 'meeting the urban health challenge'.		
1994	Some LMICs begin participating in WHO Healthy Cities initiative, although not as successful as in Europe.		
1996	Habitat II is the follow-up conference that assesses progress since Habitat I and establishes new goals for the new millennium.		
	Habitat agenda, which contains over 100 commitments and 600 recommendations is adopted by 171 countries—but has no expli-		
	cit emphasis on urban health.		
1999	WHO establishes Cities and Health Programme with mission of illuminating the relationship between health and urbanization.		
	-2000s: Emergence of urban health epistemic community and a growing research interest in urban health		
2000	MDGs include slum indicator.		
2000	UN General Assembly adopts the Declaration on Cities and Other Human Settlements in the New Millennium; however, it lacks		
2001	any specific commitment to improving the health of the world's urban population.		
2002	Inner City Health conference is organized by Centre for Inner City Health at University of Toronto.		
2002			
	The Population and Health Dynamics in Nairobi's Informal Settlements report describes slum residents having poorer health/so-		
	cial outcomes than residents in more affluent neighbourhoods, and than rural residents.		
2002	The The Nairobi Urban Health and Demographic Surveillance System (NUHDSS) launches.		
2003	The International Society for Urban Health (ISUH) is established.		
	ISUH's second annual International Conference on Urban Health (ICUH) is hosted at New York Academy of Medicine, after		
	name change from 'Inner City Health'.		
	US National Research Council's Cities Transformed: Demographic Change and Its Implications in the Developing World explores		
	implications of urban contexts on multiple issues including health.		
2004	WHO's Centre for Health Development (Kobe Centre) designates urbanization and health as one of its four research priorities.		
	USAID begins supporting Urban Health Resource Centre in India.		
2005	WHO Kobe Centre selected as the hub of the Knowledge Network on Urban Settings (KNUS), one of nine knowledge networks		
	that supported WHO's Commission on Social Determinants of Health (CSDH).		
Mid- to late-	2000s: Increasing programming on urban health in LMICs		
2007	Rockefeller Foundation hosts Urban Summit.		
	Gates Foundation funds BRAC Manoshi Project, a 5-year urban maternal, neonatal and child health (MNCH) programme.		
2008	Our Cities, Our Future, Our Health: Report to the WHO Commission on Social Determinants of Health published, draws global		
	attention to global health inequities and critical role that cities play in improving health equity.		
	Health Equity Assessment and Response Tool (HEART) is created by WHO Kobe Centre as guide for local and national officials		
	to identify health inequities and plan actions to reduce them.		
	Century of the City: No time to lose published by Rockefeller Foundation.		
2009-Present	: Growing global advocacy, research, and programming on the health of the urban poor in LMICs		
2009	ISUH's ICUH is held in Nairobi, Kenya.		
	Nairobi Statement on Urbanization and Health calls for recognition of growing urbanization and dedication to, and action on, im		
	proving urban health worldwide.		
	The Global Research Network on Urban Health Equity (GRNUHE) created with Rockefeller Foundation support.		
	Roundtable on Urban Living Environment Research (RULER) created with Rockefeller Foundation support.		
2010	Director-General of WHO declares this year as 'Year of Urban Health'.		
2010	WHO and UN-HABITAT release jointly authored <i>Hidden Cities</i> report, highlighting urban inequities.		
	Kobe Call to Action: municipal leaders and national ministers across multiple sectors commit to health actions in urban policies.		
2011	RULER report identifies areas for enhancing measurement to motivate action for urban health.		
2011	· · ·		
	UNICEF's <i>State of the World's Children</i> report dedicated to urban children.		
2013	'100 Resilient Cities' initiative launched, pioneered by Rockefeller Foundation.		
	India's National Urban Health Mission (NUHM) approved by cabinet.		
2015	USAID urban strategy published.		
2015	State of the World's Mothers: The Urban Disadvantage is published, Save the Children's annual publication.		
	Dhaka Statement on Urban Health in Sustainable Development calls for the prioritization of urban health in sustainable		
	development.		
	SDGs have stand-alone goals on health and cities, but no explicit mention of urban health; 11.1 dedicated to improving slums.		
2016	Gates Foundation announces the Challenge Initiative.		
2016	Gates Foundation announces the Challenge Initiative. Habitat III Conference held, launching New Urban Agenda.		

Table 4 Selected major developments pertaining to urban health agenda

research available on urban health. One of the authors of *Cities Transformed* reflected:

I came away thinking [urban health] is an area that is fascinating, difficult, extremely important, and yet not really well studied from a research point of view or from the point of view of effective programs, interventions and policies (I11).

In 2004, the WHO Kobe Centre designated urbanization and health as one of its four research priorities (WHO 2004). The following year, it became the hub of the Knowledge Network on Urban Settings (KNUS), one of nine knowledge networks that supported the work of the WHO Commission on Social Determinants of Health (CSDH) to tackle the 'causes behind the causes of ill-health' (GRNUHE 2010). Between 2006 and 2007, the KNUS produced 14 thematic papers and 31 case studies and participated in several workshops and global conferences in order to gather data and better communicate the health of urban dwellers (GRNUHE 2010). This resulted in Our Cities, Our Future, Our Health: Report to the WHO Commission on Social Determinants of Health (WHO 2008). The 2008 report drew global attention to the critical role that cities played in improving health equity (GRNUHE 2010) and informed the Kobe Centre's creation of the Health Equity Assessment and Response Tool, a guide for countries to detect health inequities and take action to address them (WHO 2010a).

Despite a relative increase in research interest on urban health, there remained a general lack of data on poverty, malnutrition, and disease burden in urban poor areas (I11, 13, 16; Haddad *et al.*1999; Moore *et al.* 2003). A study examining urban health statistic availability concluded that few data points were available below the national-level for most of the 37 primary and secondary health indicators identified and for the majority of countries (162 cities across 62 countries) examined (Moore *et al.* 2003). Intra-urban data was only available in three of the 62 countries, masking intra-urban health inequities (Moore *et al.* 2003). In addition, there were—and continues to be—sparse research studies on interventions in the urban context, especially those that utilize longitudinal datasets (Harpham 2007; Coast *et al.* 2012).

Mid- to late-2000s: Increasing programming on urban health in LMICs

By the mid- to late-2000s, a number of institutions involved in shaping development priorities initiated health programmes with an explicit focus on the urban poor. The Bill and Melinda Gates Foundation (Gates Foundation) became a prime sponsor of three ICUHs, supporting ISUH to expand its focus and membership to LMICs (I6). In 2007, the Gates Foundation funded Bangladesh Rural Advancement Committee's (BRAC) Manoshi programme, a community-based maternal, newborn and child health (MNCH) programme targeting slum populations (I1, 6, 7, 12, 13, 17; Hoope-Bender et al. 2014). The programme has already reached 6.9 million slum residents across several cities in Bangladesh, led to declines in maternal and neonatal mortality in its service areas, and become a model for other slum-based MNCH initiatives in LMICs (Sarker et al. 2013; Roy et al. 2015). The Gates Foundation also funded the Urban Reproductive Health Initiative (URHI) (2009-15), with implementation in India, Kenya, Nigeria and Senegal.

Several major bilateral and multilateral donors also supported urban health programming in LMICs. The Asian Development Bank, the Swedish International Development Cooperation Agency, and UNFPA, supported the Government of Bangladesh's First (1998–2005) and Second (2005–11) Urban Primary Health Care Services Delivery Project, which reached >10 million urban poor (Adams *et al.* 2015). Beginning in 2004, USAID provided financial support to establish the Urban Health Resource Centre in India, previously named USAID-EHP, which was designated as 'the nodal technical agency for Urban Health Programme' by India's Ministry of Health and Family Welfare. USAID also provided technical assistance to improve urban health metrics in India and supported the establishment of India's National Urban Health Mission (NUHM) in May 2013 (I18).

The Rockefeller Foundation also became a key urban advocate during this time, hosting an Urban Summit in 2007, and later drawing attention to urban health inequities in its report *Century of the City: No time to lose* (Peirce *et al.* 2008). Two years later, realizing the need for equity-related data and action in developing countries and building on the work of the CSDH, the Rockefeller Foundation helped establish two urban health research networks: (1) the Global Research Network on Urban Health Equity (GRNUHE), a multi-disciplinary team of researchers mostly from LMICs (GRNUHE 2010; ISUH 2009) and (2) the Roundtable on Urban Living Environment Research (RULER) Network, which developed methods and metrics for urban health (I14; ISUH 2009).

2009-present: growing global advocacy, research and programming on the health of the urban poor in LMICs

In 2009, ISUH members and 50 mayors from around the world signed the *Nairobi Statement on Urbanization and Health*, calling for the improvement of urban health worldwide (ISUH 2009). The statement urged scientists and politicians to share innovations, knowledge and lessons learned in tackling urban health challenges across high and LMICs (ISUH 2009). Following the Nairobi meeting, ISUH's global-level influence grew. One of the founders of ISUH noted:

As we got recognition for [the Nairobi Statement], the WHO and other international agencies got in touch with us ... [I] think what [ISUH] brought to the table was ... the empirical base for urban health policy. We became spokespeople [for urban health] and began participating in the conversation (I7).

In 2010, Margaret Chan, Director-General of WHO, proclaimed that year to be dedicated to urban health. The year ended with the Global Forum on Urbanization and Health in Japan, where urban leaders and state ministers committed to health actions in urban policies, reflected in the Kobe Call to Action (GRNUHE 2010; WHO 2010b). During this forum, WHO and UN-Habitat released their *Hidden Cities* report, drawing on the work of the WHO CSDH and the KNUS, again highlighting vast urban health inequalities (WHO and UN-Habitat 2010).

UNICEF demonstrated a renewed interest in urban issues, including health, in 2012, with the theme of its flagship *State of the World's Children report: Children in an Urban World* (Harpham and Tanner 1995; UNICEF 2012). The report identified policies and strategies to reach excluded children and foster equity in urban settings. USAID (2013) released a new policy, 'Sustainable Service Delivery in an Increasingly Urbanized World'. Though not focused on health, the policy recognizes both the opportunities and challenges of urbanization, and the role of cities in achieving global health objectives. In the same year, the Rockefeller Foundation pioneered the 100 Resilient Cities initiative, which is dedicated to helping cities become more resilient to physical, social and economic challenges. 'Health and wellness' is one of the four dimensions of the initiative's city resilience framework. Another global report, Save the Children's (2015) *State of the World's Mothers: The Urban*

Disadvantage focused on the health of the urban poor, primarily in LMICs.

In December 2014, 17 Sustainable Development Goals (SDGs) were proposed. Goal 3 concerned health and goal 11 concerned cities, proposing to make 'cities and human settlements inclusive, safe, resilient and sustainable' (United Nations 2015). Attempting to influence the future direction of the SDGs, ICUH 2015 put forth the Dhaka Statement on Urban Health in Sustainable Development, calling for recognition of urban health primacy in sustainable development (ISUH 2015). The Statement proposed nine action items, which the ISUH pledged to advance and monitor as both the Habitat III and SDG plans were created and executed at the national-level (Thomas et al. 2016). The Ebola epidemic in West Africa also brought global attention to the health of residents of slums and informal settlements during this time, with some in the development community calling for global and national actors to recognize these populations and allocate resources to address their needs (Snyder et al. 2014).

In October 2016, Habitat III—which aimed to revive the promises of the past Habitat meetings—launched the New Urban Agenda, a set of global voluntary commitments on sustainable urban development for the next 20 years (UN-Habitat 2016b,c). However, the agenda contains few references to health, and while noting the importance of slums, offers little in the way of concrete actions to address related challenges (*Lancet* 2016). During this time, the *Lancet* published a series on the health of people living in slums (Ezeh *et al.* 2016; Lilford *et al.* 2016), and the Gates Foundation announced a 3-year grant to fund The Challenge Initiative, a reproductive health programme that will build on the work of Urban Reproductive Health Initiative (URHI) (Johns Hopkins Bloomberg School of Public Health 2016).

Part II: factors shaping global attention to urban health Challenges concerning the political environment and issue characteristics

Three factors impeding urban health's ability to rise as a global priority concern the political environment and characteristics of the issue. The first relates to the urban health agenda's tension with the rural-oriented development agenda. Development organizations and funders have historically devoted their resources and efforts to implementing health interventions in LMIC rural settings. As perceived by the urban health community, this is partly because development agencies and funders hold a long-standing belief that urban dwellers are universally better off in terms of health. Urbanization is frequently presumed to be the result of fruitful development policy, and thus rural areas become the usual subject of development assistance (Joseph 2001). Consequently, development agencies and funders sometimes 'maintain an uneasy relationship to urban social policy, particularly with regard to poverty' (Joseph 2001). Accordingly, the rural-oriented development agenda has not only dominated the discourse, but a bias against urban-oriented programming has appeared among global donors. One respondent noted his difficulties with trying to convince donors to pay more attention to urban health:

They'll always say, "Why not rural?" or "rural is a bigger problem." [Even] when you show them the numbers, the mindset ... across donors has really been on rural. It's hard to reset the dial, even in an urbanized country (18).

This rural development bias was perpetuated by the MDGs, which led donors and agencies to focus their efforts to reach the health goals within LMIC rural populations, where the greatest returns on

investment could be demonstrated, raising concerns about health equity. One noteworthy indication of urban marginalization in the MDGs was the Millennium Villages Project, a 10-year initiative exclusively designed to help 'rural' African communities across 10 countries accelerate achievement of the MDGs and eradicate poverty, hunger and preventable disease (Sachs and McArthur 2005; Cabral et al. 2006). Development actors saw investing in rural communities to be the most sensible way to achieve the MDGs, and development more broadly (UN Millennium Project 2005). Consequently, many in the urban health community criticize the MDGs for marginalizing urban issues in development assistance (I8, 16; Satterthwaite 2003). They point to scholars' (Sahn and Stifel 2003) views that frame urban poverty as far less severe than rural poverty, rendering it of little significance to the MDGs (Satterthwaite 2003; Wirth et al. 2008; Pronyk et al. 2012). An additional challenge to the urban health agenda exists in the broader urban development community, which has historically given little priority to the improvement of population health as one of its core agenda items. This is reflected in the SDG targets encompassed in the 'city' goal and the New Urban Agenda.

The second factor is the historically scant data on urban health in LMICs. Until recently, much of the research was restricted to cities in high-income countries or comparisons of rural and urban averages. However, aggregate figures and averages mask the health outcome and wealth disparities within cities (I6, 11, 16, 18; Mutatkar 1995; Wang'ombe 1995; Todd 1996; Harpham and Blue 1997; Haddad *et al.* 1999; Harpham 2009; Anthony 2012; Rydin *et al.* 2012). One respondent noted:

[When comparing with rural], urban inevitably ends up coming out looking a lot better, because of the huge disparities in urban areas and the fact that it generates averages that really aren't very representative of anything, so that it masks the depths of poverty in urban areas and the lack of access to services by a huge part of the population (116).

This is compounded by inadequate measurement tools and indicators that are incapable of capturing this type of data (I6, 8, 11, 16; Flournoy and Yen 2004). Most of the global health measurement tools have focused sampling efforts in rural communities and the tool indicators often do not capture the urban wealth quintiles critical for demonstrating the major health inequities within urban populations. Consequently, data describing the extent of inequalities that exist within cities often originate from individual studies rather than vital statistics or systematic monitoring by the countries or cities themselves (Moore et al. 2003). For example, global surveys and assessments (i.e. USAID's Demographic and Health Surveys, UNICEF's Multiple Indicator Cluster Survey) historically collected samples that were too small to allow a detailed look at health inequalities within cities (Harpham 2008). Even when urban populations are sampled in these surveys, those residing in informal settlements, street children, and pavement dwellers are often not included (Harpham 2008). One respondent stressed this problem: 'The urban poor are just often not counted. If you don't have an address, you're not a real person' (I16).

The third factor hindering urban health's global attention is the lack of evidence on how to deliver health services to the urban poor. Few examples of successful scalable and sustainable urban health initiatives exist in LMICs (I7, 13, 14). Despite some global organizations incorporating urban health as a programmatic component or policy focus, these efforts have often been inconsistent or *ad hoc*, with little coordination among the actors engaged in the issue, and a lack of individual and institutional leadership needed to generate a coherent

approach to addressing the issue (I3, 6, 8, 13,14, 18; Moore *et al.* 2003; Pantuliano *et al.* 2012). A member of the urban health community reflected about the lack of a sustained focus on urban health:

There were success stories at least on a city level or a particular subset of a city, and I think they kind of slowly eroded and got lost. And part of that was [because] they were implemented through different organizations, different implementing partners, and they were not necessarily champions, so ... the importance of urban and what was learned has come and gone over the years (18).

Urban health research and practice often depend on techniques, paradigms, and best practices that are primarily designed for rural projects (Amis 2001). A seasoned urban health expert noted the lack of understanding around how to design an urban health programe:

People just don't understand how it works. It's quite idiosyncratic and it's complicated and so it's reasonable that people don't understand it. Even I argue like I do understand it. I understand the principles. [But] I'd never be one to say I could design a program in every place (I14).

Although there are a couple of effective partnership examples in the field of urban health (i.e. Manoshi Project, the Bangladesh Urban Primary Health Care Project) (Harpham 2009), most, according to one respondent, typically have very limited coverage because:

An agency can generally only work with so many entities—so, they'll work in two, three or five cities or a few urban agglomerations. Those will get a lot of press. But when you look at what actually happens, the population that was covered in many cases was not that impressive (I13).

The lack of solution tractability has been perpetuated by the complexity of the issue. First, urban health interventions require engagement with a larger community of stakeholders. There is a need to work at various levels—including individual, household, neighbourhood, community and city—as well as a need to include a variety of sectors' inputs (Goldstein 1995; Frankenberger *et al.* 2000; Harpham and Molyneux 2001). A member of the urban health community noted the complexity working in urban settings:

In an urban slum, you're dealing not only with a municipality's success or failure in providing, you're also dealing with national government access ... with local landlords and strong men ... with all of these efforts that are made politically to turn settlements into political blocks for votes, which can mean all kinds of trading of favours (116).

Second, LMIC governments are structured in a way that that is unfavourable for urban intervention (I8, 13, 16; Satterthwaite 2001; Harpham 2009). The responsibility for health in many LMICs administratively falls between provincial or federal government and local government. This becomes especially challenging when a political party that dominates the province opposes one in the city. This has hindered urban health efforts in Brazil, e.g. where health programmes and strategic polices have been discontinued in an effort to 'sweep clean' when a new party arrives (Burris *et al.* 2007; Harpham 2009). Also, national health plans in many LMICs are in essence rural health plans (i.e. India's long-standing Rural Health Mission), based on a past in which urban dwellers comprised a small proportion of the total population (I8, 13).

Third, there are challenges unique to working with urban populations (I1, 6, 7, 12, 14, 16; Satterthwaite 2001). Urban dwellers are largely mobile, and subsequently hard to track (Ruel *et al.* 1999). Community-based targeting, commonly used in development

interventions, may not work in urban areas, where poverty and malnutrition are often dispersed across a city and where people frequently travel and work outside of the neighbourhoods where they live (Frankenberger *et al.* 2000). Insecure or illegal tenure and housing also create obstacles (Frankenberger *et al.* 2000). One development organization representative noted government officials' perception of slums, highlighting a major obstacle to public investment in urban areas:

[Policymakers] realized that the urban poor made up the illegal slum dwellers, who become a burden on the urban resources, and so they think that if you improve the urban slums, the more number of rural poor will get attracted (I10).

Challenges concerning the urban health community

Three additional factors directly concerning the urban health community have complicated the issue's global ascendance. The first concerns the community's lack of consensus on how to approach and solve the problem. This is reflected in the lack of a standard definition of 'urban', the use of different words across the various disciplines to describe the same concept, and the extent to which traditionally high-income country urban frameworks apply and can be used to advance urban health in LMIC settings (I8, 11, 12, 13, 16; Frey and Zimmer 2001; National Research Council 2003; Satterthwaite 2007; ALNAP 2012). This is also reflected in the lack of uniformity within the community about which urban health issues are most critical to address and which approach to take (I7, I9, I13, I15, I17). This is partly a result of urban health being a multi-disciplinary domain, and partly a result of the community's initial lack of attention to urban health issues in LMICs. The community's inability to consolidate urban health into a formal discipline or training in schools of public health, despite calls from members of the community to do so since the early 2000s (Vlahov and Galea 2003) reflects this challenge.

The second factor concerns the urban health community's governance, or way of organizing and amplifying power. Those historically involved in advancing urban health were predominately from, and focused on, high-income countries (I6, I8). Despite community efforts to more actively incorporate LMIC representation in the mid to late-2000s, urban health has traditionally been perceived to be a high-income country agenda, rather than an issue that deserves attention in LMICs and on global agendas. In addition, little leadership at the individual and institutional levels has emerged capable of uniting the multi-sectoral global community (I3, 6, 8, 13, 14, 18; Pantuliano et al. 2012). The urban health community does not coordinate the institutions that did incorporate urban health as a programmatic or strategic focus. Rather, urban health-focused research networks typically are not linked to implementation efforts, and these programmatic and research efforts also lack coordination with global advocacy efforts (Pantuliano et al. 2012).

The final factor that has contributed to the issue's global neglect is the community's framing of the issue. The urban health community contends with four pervasive misperceptions: the view that urban dwellers hold an 'urban advantage' (I7, 16, 17; Rydin *et al.* 2012); the negative associations around the types of people that make up the urban poor community (I12, 14); the idea that urban only equates to mega-cities (I8, 11, 13); and the opinion that devoting resources to enhance urban capacity will cause mass migration from rural communities and will further, rather than help solve, existing problems (I7, 10). Furthermore, the community has not yet overcome the perception that health problems are impossibly complex in urban settings; the challenges associated working with urban

Urban Health Challenges	Related Factors from Shiffman and Smith (2007) Framework	Urban Health Challenge Description
1. Perceived competition with <i>de facto</i> rural-focus	7-Policy windows 8-Global governance	Rural development bias perpetuated by MDGs; also, within urban development community little attention given to health as reflected in SDGs and New Urban Agenda.
2. Limited data to describe urban health problem extent and severity	9-Credible indicators 10-Severity	Data presentation masks health outcome/wealth dispartieis in cities; measurement tools and indiactors do not capture data that can be disagrregated and uncover inequalities.
3. Little evidence on how to overcome the problem	11-Effective interventions	Few successful examples of urban health initiaitves exist; best practices in development often based on rural projects.
4. Little member cohesion	1-Policy community cohesion 5-Internal frame	Epistemic community members hold divergent perspectives, largely a result of their multisectoral representation; dis- agreement within epistemic community about how to ap- proach and solve problem.
5. Ineffective governance	2-Leadership 3-Guiding institutions 4-Civil society mobilization	Little individual and institutional leadership capable of uniting multi-sectoral epistemic community; institutions and com- munity historically focused on high-income countries rather than LMICs; and grassroots efforts scarce and only recently emergent.
6. Unsuccessful framing of issue	6-External frame	Unable to overcome pervasive misperceptions; current framings pit urban and rural health against each other.

Table 5 Six challenges for the generation of political priority for urban health

dwellers (I6, 7, 16; Harpham and Molyneux 2001); and the limited evidence of solution tractability (I7, 13, 14; Amis 2001; Harpham and Molyneux 2001). Finally, the community has been unable to redirect the conversation away from one that pits urban and rural health against each other toward a discourse that engages the ruralurban continuum and promotes the need to ensure health equity across all communities.

Discussion

The emergence of the urban health epistemic community

In the early 2000s, an urban health epistemic community began to coalesce and has since played a key role in trying to bring resources and attention to this issue at the global level. As defined by Haas (1992), an epistemic community is 'a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain'. Recent scholarship stipulates three indications of an epistemic community's existence: its members (1) act as more than the sum of their parts; (2) have previous professional interactions with one another; and (3) share a distinctive culture and shared professional norms than the bureaucracy they inhabit (Cross 2012).

There is evidence of the urban health community fulfilling each of these criteria at around the turn of the century. First, urban health experts at this time began to produce outcomes that went beyond the expectations of their formal functions. This is evidenced through their contributions to reports (i.e. *RULER*, *GRNUHE*, and *Our Cities*, *Our Future*, *Our Health: Report to the WHO Commission on Social Determinants of Health*) and advocacy statements (i.e. those produced by the ISUH in Nigeria and Bangladesh), which went beyond each member's individual, formal professional roles and responsibilities. Second, as indicated by several respondents from the urban health community, many of these individuals only began to come together frequently both formally and informally in the early 2000s. The establishment of the ISUH facilitated these frequent interactions, as reflected in the ICUHs, as well as the network meetings associated with RULER and GRNUHE. Third, a growing number of individuals across various institutions began sharing professional norms around the need to address urban health inequities, which was explicitly represented in the mission of ISUH and galvanized by the anticipation of the 2007 tipping point, despite the lack of a formal 'urban health' discipline.

Challenges and opportunities for the generation of political priority for urban health

Urban health's neglect at the global level is shaped by six key factors (summarized in Table 5). Three factors concern the characteristics of the issue and political contexts: perceived competition with the *de facto* rural-focus in development (framework factors 7 and 8: policy windows and global governance structure), limited data and measurement tools to describe the extent and severity of the problem (factors 9 and 10: credible indicators and severity), and little evidence on how to overcome the problem (factor 11: effective interventions). Three additional factors concern the urban health policy community's little member cohesion (factors 1 and 5: policy community cohesion and internal frame), ineffective governance (factors 2–4: leadership, guiding institutions, and civil society mobilization) and unsuccessful framing of the issue (factor 6: external frame).

There is a close interrelationship between the agentic and structural sets of factors—those directly under the control of the urban health epistemic community and those that are not—and the way that they interact has determined the trajectory of urban health's attention at the global level. The historical lack of data and tools for measuring urban health constrains the community's ability to transform how the issue is perceived (i.e. given the pervasive use of urban—rural comparisons and high-income country dominated discourse), which then shapes the political environment (i.e. a ruraldominated orientation among development agencies and funders). This then constrains the way the urban health community behaves and their very nature (i.e. lack of coordination of agencies to advance urban health), which then results in an ineffective framing of the issue (i.e. inability to surmount pervasive misperceptions). This again alters perceptions of the issue's nature (i.e. urban health as a 'wicked problem' with no easy solution).

The six factors shaping urban health's global political priority are intertwined and engaged in mutually constitutive effects, as reflected in the theory of structuration (Giddens 1984; Wendt 1987). These findings demonstrate the fundamental role that epistemic communities can play in raising a health issue to global agenda. They also fundamentally challenge the existing epistemic community literature, demonstrating that an epistemic community has considerable agency surrounding the amount of attention that its issue receives during the agenda-setting process. Beyond examining the policy environment in which they operate and the characteristics of the issue itself—this study demonstrates how agentic factors, and how they interact with structural factors, determines the extent to which an epistemic community can raise their issue on global agendas.

There are several opportunities for advocates to raise global political priority for urban health. For one, a greater degree of internal cohesion must be achieved among proponents working in the area of urban health before it will be possible to build consensus around urban issues in the broader community. As such, it will be important to foster collaboration by supporting systematic knowledge sharing of effective urban interventions among urban health proponents. Second, a focus on health equity by communicating urban health problems through an 'urban–rural continuum' model, may more convincingly communicate the health needs of the urban poor. Third, proponents must be more proactive in linking advocacy efforts to relevant current events, such as the SGDs and the New Urban Agenda. Finally, the community will need to invest in tools and data that enable urban disaggregation to highlight the most vulnerable populations living in LMICs cities.

Supplementary Data

Supplementary data are available at Health Policy and Planning online.

Ethical Approval

Received from MidLands Independent Review Board.

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