EVIDENCE REPORT
No 42

Empowerment of Women and Girls

The Health of Women and Girls in Urban Areas with a Focus on Kenya and South Africa: A Review

Kate Hawkins, Hayley MacGregor and Rose Oronje

October 2013

THE HEALTH OF WOMEN AND GIRLS IN URBAN AREAS WITH A FOCUS ON KENYA AND SOUTH AFRICA: A REVIEW

Kate Hawkins, Hayley MacGregor and Rose Oronje

October 2013

Contents

List of abbreviations

AFIDEP	African Institute for Development Policy
AIDS	acquired immunodeficiency syndrome
APHRC	African Population and Health Research Center
ART	antiretroviral treatment
CREHS/RESYST	Consortium for Research on Equitable Health Systems/ Resilient and Responsive Health Systems
CV	cardiovascular
DFID UK	Department for International Development
DFID RPC	Department for international Development (DFID) Research Programme Consortia (RPC)
DOTS	Directly Observed Therapy
DSS	Demographic Surveillance Site
FIDA	Federation of Women Lawyers in Kenya
GRNUHE	Global Research Network on Urban Health Equity
HIV	human immunodeficiency virus
IDS	Institute of Development Studies
IMF	International Monetary Fund
IWSD	Institute of Water and Sanitation Development
KNOTS	Knowledge, Technology and Society Team (IDS)
KNUS	Knowledge Network on Urban Settings
LMICs	low- and middle-income countries
LSTM	Liverpool School of Tropical Medicine
LVCT	Liverpool Care and Treatment
MDG	Millennium Development Goal
MNH	Maternal and Newborn Health
MSF	Médecins Sans Frontières
NCD	non-communicable disease
NGO	non-governmental organisation
NHIF	National Hospital Insurance Fund
PLWHA	People Living with HIV and AIDS
RCT	randomised controlled trial
SGBV	sexual and gender-based violence
SRH	sexual and reproductive health
STEP UP	Strengthening Evidence for Programming on Unintended Pregnancy
STI	sexually transmitted infection
TB	tuberculosis
UNDP	United Nations Development Programme
WB	World Bank
WHO	World Health Organization
WISH	Women in Sexual and Reproductive Rights and Health

Executive summary

It is well established that there is a global trend towards urbanisation and cities are growing due to an increase of existing urban populations, as well as migration. The World Health Organization (2010a) estimates that by 2050, 70 per cent of the world's population will be living in towns and cities and one in three urban dwellers will live in slums – a total of one billion people worldwide. In Latin America, the Caribbean and the majority of countries in Africa, women outnumber men in urban settings (Chant 2013). Since urbanisation trends in these low-income countries show increasing levels of urban poverty, it is important to understand how women fare, particularly in regard to their health. Indeed, the health of women and girls in contexts of poverty across the globe remains an area of concern within national and international development. Furthermore, with an increasing proportion of the world's people living in urban settings, the health conditions of people in densely populated, largely informal residential areas within and adjacent to the main metropolitan complexes deserves particular attention. As we near the target date for the Millennium Development Goals (MDGs), and policymakers' attention turns to setting the parameters of frameworks to guide and measure development progress, this is an opportune moment to review global progress on tackling the challenges posed by the intersections of gender, urbanisation and ill health.

The MDGs aim to make significant improvements in the lives of the poor, including dwellers in informal settlements, while promoting gender equality and empowering women and improving outcomes related to maternal and reproductive health, child health and AIDS, TB and malaria. The role of urbanisation in accelerating or compromising progress towards the MDGs was a focus of the WHO Commission on the Social Determinants of Health which ran from 2005 to 2008, prompting a number of important research papers that highlighted the structural issues affecting conditions in urban areas (for example, KNUS 2008). As we reach the endpoint of the MDGs, urban settings are once again coming under the spotlight (UN-HABITAT 2013; World Bank/IMF 2013).

This thematic review focuses on a range of health challenges faced in particular by women and girls living in low-income urban settlements in expanding cities in Kenya and South Africa. The review has been compiled as part of a larger body of work being conducted by the Institute of Development Studies (IDS) and its partners on gender and international development and financed by the UK Department for International Development (DFID). The review was preceded by a literature search (using keywords to reflect the thematic focus) of key databases of published literature, as well as a search for grey literature and documents describing interventions aimed at addressing these health challenges. An online discussion hosted by IDS gave a further indication of current debates and assisted in the identification of interventions.

The Knowledge Network on Urban Settings (KNUS) (2008) suggest that adopting a gendered approach to assessing health in urban areas has a number of beneficial effects. It can enable us to consider interventions that go beyond the health sector, for example the effects of improved urban safety on girls' ability to attend school. A gendered lens can provide a more nuanced and critical analysis of 'the household' within urban areas, in terms of composition and role in encouraging health. Furthermore, it allows us to think through how women and girls are involved in interventions to improve health in urban areas and the potential barriers to their participation. In this review we have purposefully searched for literature that would shed light on the experiences of women and girls with respect to the health challenges of low-income urban settlements. In considering gender equity, some scholars have argued for the need to understand how challenging urban conditions interact with existing gender power imbalances to produce poor health outcomes among girls and women (Frye *et al*. 2008). Frye *et al.* (2008) argue that women and men occupy different

spaces in urban settings that differentially influence health outcomes and may also entrench harmful gender norms. Women may be restricted in terms of their ability to move within urban spaces, either because they are confined to the home and expected to carry out care duties or other gender-specific household work, or because they do not feel able to move freely in the urban environment. The fear of violence may prevent them from moving safely in public spaces. This affects their ability to form the social ties and bonds that are important to people living precariously in informal economies (GRNUHE 2010). A lack of mobility has implications for access to public services and their health benefits. It has been argued that gender-specific needs should be taken into consideration in designing interventions to ensure that interventions do not continue to perpetuate existing gender inequalities (Frye *et al.* 2008).

The corpus of work on urban health is growing and consists of a range of disciplinary perspectives, from public health and epidemiology, to social science research. Several of the studies are context-specific, while others take a broader conceptual view. The evidence consistently shows that poor people living in informal settlements in urban areas face a disproportionate health challenge. Frye *et al.* (2008) argue that studies contributing a gendered analysis are still limited. The review focuses on four key areas: (1) identification of contextual factors and conditions that impact upon the health of women and girls in urban areas; (2) identification of particular health issues having a detrimental effect on the wellbeing of women and girls in urban areas; (3) a summary of interventions that have aimed to address the health challenges of women and girls in urban areas; and (4) the identification of gaps in knowledge. We limited the geographic scope to Kenya and South Africa.

The literature reflects a debate about the advantages and disadvantages of urban life, reflected in the terms 'urban benefits' and 'urban penalties'. City life is suggested to have its freedoms and pleasures, such as leisure opportunities, new relationships, anonymity and alternate ways of organising households, but this may come at the expense of social support networks. Cities, it is argued, also intensify certain risk factors for ill health and introduce new risks (WHO 2010b). The review revealed a clear emphasis in the urban health literature on the structural factors that cause illness and the social determinants of ill health as they pertain to gender and urbanisation. In low-income urban settlements, the health environment remains less than adequate, with overcrowded and substandard housing, patchy provision of water and sanitation, and poor access to affordable quality food or safe spaces for recreation. The reality of intra-urban inequality and its effect on health is a crucial factor for consideration.

The literature points to ways in which residence in low-income urban areas is thus associated with particular health challenges for women and girls, such as those linked to: sexual, reproductive and maternal health; alcohol use; non-communicable diseases related to poor diet, tobacco and sedentary lifestyles; as well as an ongoing high prevalence of infectious diseases such as HIV and TB. There is also concern about the mental health burden arising from the stresses of surviving on the economic margins in large cities characterised by high levels of crime and violence, and more fragmented access to social support. These disease burdens occur at the intersections of different axes of socially constructed inequality. The coexistence of these disease burdens, the 'co-morbidity' when people experience more than one of these health conditions at the same time, and the synergies evident with respect to approaches to interventions come together to strengthen an argument for the need to consider ill health in low-income urban environments with a broad and holistic view.

With respect to the kinds of 'evidence' prevalent in the literature, the review revealed a bias towards quantitative biomedical research evidence with a narrow disease focus, which has dominated debates on urban health in developing countries, at the expense of qualitative as well as gender-focused analyses reflecting a broader range of the interconnecting health

concerns of women and girls. The knowledge that appears to have dominated debates on urban health in developing countries is largely quantitative, whereas qualitative evidence, including experiential knowledge of poor and marginalised groups that live in informal settlements, has been less prominent. The bias in the existing body of knowledge on urban health in developing countries has thus to a large extent silenced the voices of the inhabitants of these areas in key decision-making processes. Indeed, it has been argued that relativist scientific knowledge and lay knowledge, although often marginalised in the health sector, are critical in decision-making as they capture contextual issues, which are critical for policy action (Theobald and Nhlema-Simwaka 2008). It has also meant that some important determinants of health have received less attention. Much of the existing evidence does not provide much insight on how gender inequalities interact with the health disadvantage of living in poor urban settings. Critics have argued that urban health studies often ignore the political and systemic nature of social stratification, instead studying the health impact of decontextualised and isolated characteristics of population groups (Frye *et al.* 2008; Muntaner, Lynch and Davey Smith 2003; Raphael and Bryant 2003; Williams 2003).

Furthermore, the GRNUHE (2010) notes that existing research has focused mainly on average population health outcomes rather than on the distribution of health outcomes within an urban area (that is, urban health inequities). Furthermore, the literature has prioritised health risks associated with local hazards, such as shelter or water and sanitation, while overlooking the broader social and environmental health risks that exist in most urban settlements. In addition, GRNUHE (2010) has found notably little research evidence on the relationship between urban governance and urban health. Acknowledging the bias towards quantitative evidence in urban health research, Galea and Vlahov (2005: 357) have called for interdisciplinary studies, given 'the complexity of causation and the diversity of mechanisms that may explain how characteristics of the urban environment may affect the health of urban populations'. They argue that theoretically informed efforts combining the perspectives of different disciplines and that use quantitative and qualitative methods where appropriate are more likely to provide more effective answers to the question of urban health.

The urban health literature calls for interventions that go beyond health sector responses to also address the social determinants of ill health. Interventions with a broad multisectoral emphasis (projects like Healthy Cities that engage stakeholders beyond the health sector and government), as well as interventions based on community leadership and participation that acknowledge power relations and governance, are given prominence in the literature. Our review has found in the literature some examples of interventions that seek to address the structural drivers of ill health while tackling participation and inequality. Yet few researchers point to policy or programmatic changes that are explicitly gendered. Frye *et al.* (2008) suggest that, given the paucity of evidence on gender and urban health research, a new approach is needed. They argue that researchers should:

- explicitly address gender as a structural cause of ill health;
- consider the gendered impact of urban spaces;
- collect data that enable gender-sensitive analysis and take account of intersectionality and the way that various forms of inequality can alter women's experience of living in low-income urban settlements;
- incorporate new methods that allow us to understand health problems rather than just quantify them;
- blend disciplines to avoid an apolitical and positivist analysis.

What then can be concluded about ways to address gendered aspects of health problems for poor women and girls in low-income urban settlements in Kenya and South Africa? A key issue relates to advocating interventions that can address some of the health problems in a holistic rather than an isolated way, and that attempt to consider the underlying structural factors that go beyond narrowly defined notions of health. A consideration of interventions

prompts the question of levels of responsibility for addressing the health problems of poor women and girls in low-income urban settlements, from the level of international stakeholders, such as donors, to national governments and local municipalities. Infrastructural reform and accessibility of basic services are key, as also are cross-sectoral approaches that can appropriately support change on the ground. We would argue that women should not walk the road alone, and that interventions should focus on community involvement, including engaging men, and should see the urban poor as change agents and not just passive recipients of interventions and policy pronouncements. It appears that campaigning and advocacy at national and sub-national levels is necessary to point out gaps in implementation and to inform international action to avoid uncritical blueprint solutions. Moreover, women living in 'slum' areas are not a homogenous group and while they require the provision of integrated services, careful targeting might be needed to avoid marginalisation.

Finally, we would suggest that it is important to generate robust evidence and evaluate existing interventions rather than encourage a constant proliferation of standalone projects. However, 'evidence' should include the voices of women themselves and their experience of life in these settlements. Communication techniques can be powerful in making a range of evidence available, palatable and relevant. We would argue for a need to communicate issues in new ways and to seek accounts that also highlight the potentially positive features of urban living for women and girls. This might lead us to ask new questions, to see the challenges from different perspectives and to bring new life to a topic for jaded decision-makers.

1   Introduction

It is well established that there is a global trend towards urbanisation. The World Health Organization (WHO 2010a) estimates that by 2050, 70 per cent of the world's population will be living in towns and cities and one in three urban dwellers will live in low-income settlements – a total of one billion people worldwide. In Latin America, the Caribbean and the majority of countries in Africa, women outnumber men in urban settings (Chant 2013).

The health of women and girls in contexts of poverty across the globe remains an area of concern within national and international development. Furthermore, with an increasing proportion of the world's people living in urban settings, the health conditions of people in densely populated, largely informal residential areas within and adjacent to the main metropolitan complexes, deserves particular attention. As we reach the target date for the Millennium Development Goals (MDGs), and policymakers' attention turns to setting the parameters of frameworks to guide and measure development progress, this is an opportune moment to review global progress on tackling the challenges posed by linkages between gender, urbanisation and ill health.

The MDGs aim to make significant improvements in the lives of those living in low-income urban settlements, while promoting gender equality and empowering women and improving outcomes related to maternal and reproductive health, child health and AIDS, TB and malaria. The role of urbanisation in accelerating or compromising progress towards the MDGs was a focus of the WHO Commission on the Social Determinants of Health which ran from 2005 to 2008, prompting a number of important research papers that highlighted the structural issues affecting conditions in urban areas (for example, KNUS 2008). As we reach the endpoint of the MDGs, urban settings are once again coming under the spotlight (UN-HABITAT 2013; World Bank/IMF 2013), in terms of both the advantages and disadvantages that they might offer regarding health outcomes.

This thematic review focuses on a range of health challenges faced by women and girls, with a particular emphasis on low-income urban settlements in expanding cities in Kenya and South Africa. In this introduction we delineate the scope of the work and the approach we have taken. The overall methodology for this review is outlined in Section 2. The review was preceded by a literature search of key databases of published literature, as well as a search for grey literature and documents describing interventions aimed at addressing these health challenges. An online discussion hosted by the Institute of Development Studies gave a further indication of current debates and assisted in the identification of interventions. The literature search revealed a dearth of formal evaluations of interventions to address the health problems of women and girls in settings of urban poverty. We thus resolved to include in this review a range of different kinds of 'evidence' documenting the experience of women and girls, not only evidence that might be judged by conventional public health standards to be of 'high quality'. In Section 3 we problematise notions of what constitutes quality evidence and further make an argument for including descriptions of a range of interventions, including those that have not been formally evaluated as 'successful'. In Section 4 we review some of the broader debates in the literature on urbanisation and health and delineate some of the cross-cutting issues of concern. Section 5 provides an overview of some of the pertinent health concerns in Kenya and South Africa for women and girls in urbanising areas and summarises interventions in the respective areas of concern. Section 6 discusses important considerations for interventions that seek to respond to the health challenges in low-income urban settlements. A recurring theme in the literature is a focus on the need for policy responses that are multisectoral and that take a broader approach to addressing the structural determinants of ill health. In our final section we review this emphasis and conclude with a summary of recommendations that emerge from this call.

The areas of the city or town where the poor live are defined in many ways – as slums, ghettos, colonies, the inner city, informal settlements, peri-urban areas, and townships – and many of these descriptors come with their own stigmas and stereotypes. UN-HABITAT defines a slum as an area with substandard housing and a lack of one or more of the following: 'improved water supply, improved sanitation, sufficient living area, durability of construction, and security of tenure' (GRNUHE 2010: 2). It is important to note that within and across different countries the standard of living within these areas can vary, for example with respect to the degree of formality in terms of service provision or security of tenure. For the purposes of this review, we will use the term 'low-income urban settlements' to refer to the places in urban areas where the poor most often live.

1.1 Looking holistically at health

In Africa, attention in the arena of health and development, particularly in the mid-1990s and into the early 2000s, was directed particularly to the epidemic of HIV, although recent years have brought a broadening out of health concerns in global debates. Indeed, pressing issues remain regarding the vulnerability of women and girls to infection, the effects of an HIV-positive diagnosis and the poor condition of their sexual and reproductive health more generally. The recent push towards the attainment of MDG 5 on maternal health has led to a renewed interest in sexual and reproductive health and rights, although this has at times been narrowly drawn and focused on interventions that improve the coverage and uptake of contraceptive services and emergency obstetric care.

Within this review we have been led by the themes that emerge from the literature identified by our search. There is a clear emphasis on the structural factors that cause illness and the social determinants of ill health as they pertain to gender and urbanisation. In urban areas, the health environment remains less than adequate, with overcrowded and substandard housing, patchy provision of water and sanitation, and poor access to affordable quality food or safe spaces for recreation. Migration to, and residence in, such areas is thus associated with particular health challenges for women and girls, such as those linked to alcohol use; commercial sex work; non-communicable diseases related to unhealthy diet, tobacco and sedentary lifestyles; as well as an ongoing high prevalence of infectious diseases such as HIV and TB. In addition, there is concern about the mental health burden arising from the stresses of surviving on the economic margins in large cities characterised by high levels of crime and violence, and more fragmented access to social support. This report unpicks some of the interconnections between the range of health challenges faced by women and girls.

Women and girls in poor urban settings are affected by a broad web of problems related to environmental health. This is sometimes characterised as the 'double burden' of communicable and non-communicable diseases. WHO (2010b) has described the intersecting health conditions experienced by the urban poor as a 'triple threat'.

> In many cities around the world, health determinants have combined to create a triple threat of urban diseases and health conditions. This triple threat consists of (a) infectious diseases such as HIV, tuberculosis, pneumonia and diarrhoeal infections; (b) non-communicable diseases and conditions such as heart disease, cancers and diabetes; and (c) injuries (including road traffic accidents) and violence.
>
> (WHO 2010b: xii)

Considerable overlap exists in the kinds of interventions required to respond to HIV infection on the one hand, and non-communicable diseases (NCDs) on the other. The shared chronic, lifelong nature of the conditions is increasingly noted, alongside the need for cross-learning and integrated programmes for prevention, early detection, long-term disease management and social protection strategies. Learning from sexual and reproductive health interventions regarding approaches to behavioural change and tackling stigma may assist us in

overcoming the stigma attached to other chronic conditions such as certain mental illnesses and other NCDs, providing insights on approaches to smoking cessation, improving diets and encouraging exercise. Chronic disease can impact on sexual and reproductive health outcomes. For example, it is clear that mental illness can affect people's ability to adhere to HIV treatment. The Knowledge Network on Urban Settings (2008) suggest that malnutrition and helminths (worms) associated with poor sanitation can make people more susceptible to HIV infection and negatively affect the health outcomes of people living with HIV.

The coexistence of these disease burdens, the 'co-morbidity' when people experience more than one of these health conditions at the same time, and the synergies evident with respect to approaches to interventions, come together to strengthen an argument to approach ill health in low-income urban environments with a broad and holistic view.

1.2 Women, girls and gender

The Knowledge Network on Urban Settings (KNUS) (2008) suggest that adopting a gendered approach to assessing health in urban areas has a number of beneficial effects. It can enable us to consider interventions that go beyond the health sector, for example the effects of improved urban safety on girls' ability to attend school. A gendered lens can provide a more nuanced and critical analysis of 'the household' within urban areas, in terms of composition and role in encouraging health. Furthermore, it allows us to think through how women and girls are involved in interventions to improve health in urban areas and the potential barriers to their participation.

In this review we have purposefully searched for literature that would shed light on the experiences of women and girls with respect to the health challenges of low-income urban settlements. We also wished to include work that might explore how men, women and people of other genders might experience health in urban areas. It is worth noting that none of the literature that we reviewed challenged notions of gender as a binary of men and women, characterised by masculine and feminine traits that are fixed and immutable. Indeed the majority of papers did not disaggregate data to take account of socially constructed differences related to gender, ethnicity, sex, class or other categorisations.

We have further refined this review to pay particular attention to work focused on the poorest and most powerless people living in the most difficult urban spaces. In this review, where possible, we have incorporated an understanding that multiple, socially constructed axes of inequality come together to affect how we experience the world. A person's experience of urban living, their health and the existing public policies and programmes aimed at improving their circumstances, are mediated by their class, age, gender, sexuality, ethnicity, nationality and (dis)ability. Often a combination of these characteristics coalesce in ways that compound their oppression and marginalisation. Policies that do not take these differences into account may penalise certain groups in ways that support existing hierarchies of oppression rather than improve the lives of the poorest and most powerless. By not recognising their agency, such policies may also fail to capitalise on opportunities to harness it.

1.3 Scope of the review

The review focuses on four key areas: (1) identification of contextual factors and conditions that impact upon the health of women and girls in urban areas; (2) identification of particular health issues that have a detrimental effect on the wellbeing of women and girls in urban areas; (3) a summary of interventions that have aimed to address the health challenges of women and girls in urban areas; and (4) identification of gaps in knowledge. We limited the geographic scope to Kenya and South Africa.

2   Methodology

2.1   Electronic searches

To identify the literature for this review, we searched the following electronic databases: the Web of Science; Science Direct; Global Health; Pubmed; Anthrosource; Anthropology Index Online; Eldis; AfroLib (WHO); COCHRANE for eligible studies. In our judgement it seemed likely that the relevant studies would be indexed in these databases.

2.2   Other sources

We also searched for relevant grey literature, including programme evaluations and intervention studies in the following locations: the websites of relevant DFID research programme consortia (CREHS, RESYST, Evidence for Action, STRIVE, STEP UP, PRIME); the International HIV/AIDS Alliance website; UNICEF; UN Women; and R4D.

2.3   Delimiters

We searched for literature published during the last ten years (from 2002 onwards). We limited the search to the titles of each publication and used specific relevant search terms. Searches were limited to English for feasibility reasons. Annex 1 contains a detailed description of the search terms used and their application in different databases.

2.4   Selection of studies and analysis

Two research assistants assessed the studies identified by the searches by evaluating the abstracts for potential suitability for the intended review. Those papers that were clearly irrelevant to the topic were discarded. Difficult cases were adjudicated by the lead researchers. The final folders A–E had 175 papers in total, and there was an additional folder of interventions which had seven papers. The two authors reviewed these papers and independently assessed which they felt should be included in the review. The authors then agreed on the selection of papers that would be read with an eye to inclusion in the review. The central criteria for selection were thematic and geographical relevance and assessed quality. However, attention was also given to including papers covering a range of health problems, and papers focused on both Kenya and South Africa. The full texts of all the papers and other literature identified as potentially relevant were retrieved.

In addition to the search methodology outlined above, a further search was conducted using standard internet engines to search purposefully for descriptions of relevant interventions that have not been mentioned within the peer reviewed literature. This additional search was conducted to supplement the interventions identified in the published literature to ensure a more comprehensive review.

The lead authors jointly read all the selected papers and a thematic analysis was conducted. This enabled the researchers to identify the key themes covered and the relevant theoretical debates, as well as the gaps in the core selected literature. The areas to be covered in the review were then drawn out from this analysis. These agreed themes were also informed by the range of arguments and themes that emerged in an IDS online discussion hosted by the lead researchers in Jan 2013. This discussion involved a range of participants from different sectors brought together to debate and share experiences about gender, health and urbanisation.

3   The politics of evidence

In this section we discuss the range and nature of the evidence on the urban health challenge for women and girls, and the extent and limitations of evaluations of interventions in urban health.

The corpus of work on urban health is growing and consists of a range of disciplinary perspectives, from public health and epidemiology, to social science research. Several of the studies are context-specific, while others take a broader conceptual view. The evidence consistently shows that poor people living in informal settlements in urban areas face a disproportionate health challenge. Frye *et al.* (2008) argue that studies contributing gendered analysis are still limited. The Global Research Network on Urban Health Equity (GRNUHE) (2010) contends that urban health literature from low- and middle-income countries (LMICs) is dominated by studies of life expectancy and under-five mortality, which are usually stratified according to 'slum' versus 'non-slum' dwellers, or urban versus rural. The GRNUHE (2010) further notes that existing research has focused mainly on average population health outcomes rather than on the distribution of health outcomes within an urban area (i.e. urban health inequities). Furthermore, the literature has prioritised health risks associated with local hazards, such as shelter or water and sanitation, while overlooking the broader social and environmental health risks that exist in most urban settlements. In addition, GRNUHE (2010) has found notably little research evidence on the relationship between urban governance and urban health, yet urban governance (policy, administration, implementation, political will and action by all urban stakeholders, including government, non-governmental players, the private sector and communities) is a key structural determinant of urban health.

Critics have argued that urban health studies often ignore the political and systemic nature of social stratification, instead studying the health impact of decontextualised and isolated characteristics of population groups (Frye *et al.* 2008; Muntaner *et al.* 2003; Raphael and Bryant 2003; Williams 2003). As such, the knowledge that has dominated debates on urban health in developing countries is largely quantitative, whereas qualitative evidence, including experiential knowledge of poor and marginalised groups that live in informal settlements, has remained less prominent. The bias in the existing body of knowledge on urban health in developing countries has thus to a large extent silenced the voices of the inhabitants of these areas in key decision-making processes. It has also meant that some important determinants of health have received less attention. For instance, gender – a major determinant of health – has not received much attention in the existing literature on urban health (Frye *et al.* 2008). Much of the existing evidence provides little insight into how gender inequalities interact with the health disadvantage of living in poor urban settings. Indeed, important health challenges underpinned largely by gender remain markedly under-researched in the existing literature, including gender-based violence, abortion, and health issues of sexual minorities.

This reality points to the politics of evidence in the field of health where biomedical evidence is seen as the most scientific evidence and therefore prioritised, whereas qualitative evidence is often seen as non-scientific and therefore not given as much weight. Also importantly, biomedical evidence can de-emphasise the 'politics' of an issue, recasting it as a purely medical problem that requires a medical solution. This is reflected for example in the studies that examine maternal and child health in the low-income settlements of Nairobi (see Fotso *et al.* 2008, 2009; APHRC 2002). These studies draw less attention to sensitive issues of universal human rights and the political marginalisation of poor people, and instead recommend the need for government to partner with the private sector in order to extend health care services into 'slum' communities, and the need for public education for poor people on the risks during pregnancy and after childbirth. As such, the focus on biomedical or quantitative evidence inadvertently marginalises the sensitive underlying political issues that continue to produce and perpetuate the existence of informal settlements.

Acknowledging the bias towards quantitative evidence in urban health research, Galea and Vlahov (2005: 357) have called for interdisciplinary studies, given 'the complexity of causation and the diversity of mechanisms that may explain how characteristics of the urban environment may affect the health of urban populations'. They argue that theoretically informed efforts that combine the perspectives of different disciplines and that use quantitative and qualitative methods where appropriate are more likely to provide more effective answers to urban health questions. Indeed, it has been argued that relativist scientific knowledge and lay knowledge, although often marginalised in the health sector, are critical in decision-making as they capture contextual issues, which are critical for policy action (Theobald and Nhlema-Simwaka 2008).

All these arguments point to the need for shifting the focus of urban health research to interdisciplinary studies in order that, as argued by Frye *et al.* (2008: 620), the 'field does not default to the largely atheoretical and positivist methods and approaches of the public health and epidemiological research within which it is currently situated'. This review has attempted to incorporate literature from a range of disciplines, yet the biases noted by the authors referenced above are evident in the published works located by the search terms. There is an absence of literature that takes a gendered perspective. We have also noted a tendency in the more biomedically oriented literature for the use of statements that suggest underlying moral assumptions, for example about the sexual activity of poor women or sex workers, when the evidence does not necessarily support these judgements. At times the city is also presented as a corrupting influence, and there is less effort to include the voices of those living in urban spaces, in order to explore what people themselves might assess as both the advantages and disadvantages of urban living. Our search has also found few formal evaluations in the published literature of projects or interventions to address the health challenges of low-income urban settlements, either in general or with a focus on specific health problems. We have included descriptions of interventions mentioned in the published and grey literature, even though we have found few formal evaluations to provide evidence to assess the 'success' of such interventions. In line with the calls noted above for interdisciplinary studies that include more of the voices of people living in poor urban settlements, we would argue that ideas about what constitute 'successful' interventions or projects should include the assessments of a range of relevant stakeholders, including the beneficiaries of such initiatives.

4 Overarching context and debates

The literature on urbanisation from high-income countries is characterised by debates over whether urban life brings health disadvantages or benefits, commonly known as 'urban penalties' and 'urban benefits'. The urban penalty theory posits that cities 'concentrate poor people and expose them to unhealthy social and physical environments', which is considered inherently harmful (Freudenberg *et al.* 2005: 1). Yet this has been challenged by claims that in some countries the health on average of the urban populations is better than that of their rural counterparts (Vlahof, Galea and Freudenberg 2005).

Those who would emphasise the benefits of living within urban areas for women and girls argue that these are not confined to health. Tacoli and Satterthwaite (2013: 3) argue that:

> Urbanization is often associated with greater independence for women. This is the result of better opportunities than in rural areas to engage in paid employment outside the family, better access to services, lower fertility rates, and some relaxation of the rigid social values and norms that define women as subordinated to their husbands and fathers and to men generally.

Yet it has also been pointed out that in urban contexts women's employment is often characterised by lower wages than for men, and informal working arrangements. Women are still expected to engage in domestic and caregiving work alongside work outside the home. Their mobility is often restricted by spatial and social factors that can also limit employment options. This may be more marked for women in low-income settlements (Chant 2013).

It is thus evident that the question of health benefits or disadvantages associated with urban living is a complex one. The following section explores some of the underlying reasons given for some of the health disparities that have existed within urban areas and between urban and rural areas: differences in the urban landscape, inequality, patterns of migration and access to health services.

4.1 Differences in the urban landscape

There are different types of urbanisation, from the growth of mega-cities in some settings to the proliferation of small towns and urban sprawl on the edges of established conurbations. Indeed, the work examined for this review refers to a wide range of sites that might be classified as 'urban'. The notion of 'peri-urban' has also come to encapsulate an ambiguous conceptual and geographical space (Marshall *et al.* 2009).

The infrastructural benefits of city life as well as positive environmental measures are not distributed evenly or equally. In part this is due to the geography, housing and infrastructure of areas where the poorer sector of the urban population live, which put them at risk of ill health due to environmental factors. GRNUHE (2010: 16) state:

> As a general rule, the poor have usually lived where nobody else wants to live – downstream, downwind, downhill in low-lying land and floodplains (or uphill if the hills are prone to landslide), in polluted and dangerous neighbourhoods, near polluting industries and so on.

Poor women in urban areas in Africa tend to live in low-income and at times informal settlements, which have been historically neglected by governments, partly because of their uncertain legal status, either in the past or at present. The inadequate living conditions in these settlements are characterised by a general lack of amenities including water, electricity, sanitation and sewerage systems, garbage collection, and public health facilities. The poverty and vulnerability of women who are drawn into, or born into, low-income

settlements in cities are compounded by these living conditions, which result in worse health outcomes compared to those for women living in other parts of the city. The box below summarises some of the key features that impact on wellbeing in the urban health environment.

Box 1 Health hazards associated with low-income urban settlements

- Urban air pollution kills around 1.2 million people each year around the world (WHO 2010a). Motor vehicles, industry, and burning rubbish are major causes of poor air quality (WHO 2010a and b). Indoor air pollution, for example through gas and kerosene cooking equipment, can negatively impact the health of women and children (Chant 2013).
- Households and industry can be built too close to one another, leading to contact with industrial waste and pollutants (KNUS 2008). Where informal settlements are not covered by public cleaning services people live in close proximity to household waste (including faecal waste), which contaminates water supplies and food preparation (Gulis *et al.* 2004).
- These areas tend to be built on land that others do not want and therefore they are geographically fragile and prone to landslides and flooding (GRNUHE 2010).
- Inadequate water supplies (from private providers and from standpipes) and poor sanitation can lead to water contamination and water-borne disease and infection (GRNUHE 2010; KNUS 2008; Gulis *et al.* 2004). In many settings women are tasked with collecting water. This takes up time when they might otherwise be employed and can also be risky. The fear of violence on the way to, or while using public latrines, can make it difficult for women to remain clean and healthy when they are menstruating.
- Overcrowding and high-density housing can lead to violence, stress (WHO 2010b) and respiratory disease (KNUS 2008).
- Poorly planned road traffic calming measures and a lack of pavements can leave the poor more vulnerable to accidents (GRNUHE 2010; WHO 2010b; KNUS 2008).
- Lack of open space and feelings of physical insecurity can discourage physical activity and a lack of healthy recreation (GRNUHE 2010; WHO 2010b).

Low-income urban settlements do not exist in a condition of stasis; they are often subject to programmes of regeneration, gentrification, and state-sponsored upgrading and clearance. Imposed changes in the geography of poor urban spaces have the potential to improve the health-supporting aspects of these places, for example by improving housing, the availability of social services or sanitation. But they can also lead to disruption that may have a detrimental effect on the health of inhabitants. For example, they can lead to the dispersal of personal networks, which are key to social capital. They can also cause living arrangements to become more precarious, with the result that it is more difficult to access entitlements (for example, to register for school or receive social grants and other state benefits) (KNUS 2008).

4.2   Inequality within urban settings

Existing urban health research reveals the marked inequity and inequality that exists within urban areas and raises debates about the need to address the underlying political, economic and social factors that produce 'slum' areas. Inequity and inequality are conceptually central to the urban health challenge, be it in terms of the burden of disease or access to quality health care services. Debates also exist about inequality of health outcomes between rural and urban areas. The literature reveals the complexity of the picture in different contexts and suggests that it is important to avoid generalisations and broad assumptions, for example that urbanisation necessarily improves health outcomes. Within poor areas and communities there is heterogeneity; even poor neighbourhoods are not uniformly poor or vulnerable. Considering poverty in relation to gender, ethnicity, race and caste and other axes of inequality can highlight those people who might be neglected in interventions to improve urban health (GRUNHE 2010).

Dye (2008) contends that urban settings tend to be characterised by better neonatal mortality rates and lower fertility rates. However, general trends towards better health only provide a partial picture of the health of poor people in urban areas. In some cases the poorest socioeconomic groups in urban areas can have worse health outcomes than their rural counterparts (GRNUHE 2010; KNUS 2008). For example, APHRC (2002) found that child mortality in Nairobi's 'slums' was two and a half times higher than in other cities in Kenya, and three to four times the Nairobi average.

In Kenya, inequity in access to care is pronounced in intra-urban comparisons, with people living in low-income settlements having relatively limited access to health care due, mainly, to inability to pay for health care services (Zulu *et al*. 2011; Fotso *et al*. 2008). However, in South Africa, Booysen (2003) found limited evidence of substantial intra-urban disparities. Instead, it was noted that inequality was worse in smaller urban settlements (i.e. towns) as opposed to larger ones (i.e. small cities and metropolitan areas) (Booysen 2003). Meanwhile, Vearey *et al*. (2010) found that internal migrants residing in the peripheral informal settlements in South Africa were worse off than cross-border migrants residing in the central city, in terms of having access to basic services – such as water, sanitation and refuse collection.

Income inequality within urban settings has a negative effect on health. Although average incomes tend to be higher in urban areas there is great inequality in terms of distribution of resources and basic foodstuffs and also the cost of other supplies (KNUS 2008). Harpham (2009) argues that, although data are patchy, it appears that when one controls for wealth, the health benefits accrued by living in urban settings disappear. Intra-urban inequity and inequality extend beyond urban health into the areas of education, income, livelihood opportunities, and transportation, among others.

If interventions are to promote equity, efforts must consider vulnerable groups and incorporate sensitivity to age, gender and other axes of difference (Sverdlik 2011). In considering gender equity, some scholars have argued for the need to understand how challenging urban conditions interact with existing gender power imbalances to produce poor health outcomes among girls and women (Frye *et al*. 2008). For instance, Amnesty International (2010) has argued that the lack of sanitation facilities in Nairobi's slums has not only exposed girls and women to the threat of sexual violence (girls and women have to share the few communal toilets located within the slum communities and often have to leave their houses at night to use communal bathrooms or open grounds), but also to reproductive illnesses associated with poor hygiene, given women's special hygiene needs, particularly during menses. It has been argued that such gender-specific needs should be taken into consideration in designing interventions to ensure that they do not continue to perpetuate existing gender inequalities (Frye *et al*. 2008).

Frye *et al*. (2008) argue that women and men occupy different spaces in urban settings, which influences health outcomes and may also entrench harmful gender norms. Women may be restricted in terms of their ability to move within urban spaces, either because they are confined to the home and expected to carry out care duties or other gender-specific household work, or because they do not feel able to move freely in the urban environment. For example, the fear of violence may prevent them from moving safely in public spaces. This affects their ability to form the social ties and bonds that are important to people living precariously in informal economies (GRNUHE 2010). A lack of mobility has implications for access to public services and their health benefits. Chant (2013) describes a number of ways in which urban transport planning is gender-blind and thus may be unsupportive of women. For example, it can prioritise travel to the city centre at times that do not support women's work in domestic and informal work, overlooks the safety concerns of women when it comes to moving within urban areas and does not adequately meet the needs of elderly and disabled travellers (Chant 2013). Education is key to reducing social and economic

inequalities (Guterres and Spiegel 2012). In the Kibera 'slum' in Nairobi, girls stated that fear of harassment and rape on the way to school was one of the reasons that they did not attend (UNESCO 2010).

Heteronormative biases in policies related to slum upgrading may mean that male-headed households where there are children are prioritised for re-housing (KNUS 2008). Female-headed households or female same sex partners may be adversely affected by this bias. Those without formal papers that ascribe entitlements to housing and land are particularly vulnerable in this situation. However, this is not always the case. In South Africa, for example, housing programmes can favour female-headed households (Chant 2013).

Women who are HIV-positive may be subject to stigma, discrimination, abuse and violence, which can have a significant impact on their health and wellbeing. Women who resist heteronormative living and family arrangements, such as sex workers, can be marginalised from the informal support structures that these types of normative kinship arrangements often convey (Gulis *et al.* 2004). Lesbian and bisexual women may be at increased vulnerability to certain health conditions (Herrick *et al.* 2010). Chant (2013) suggests that women who transgress heteronorms, such as women who live independently, can be more vulnerable to sexual assault. This is most obvious in the case of lesbian and bisexual women. However, Chant (2013: 20) points out that:

> This includes lone women and lone mothers who, as revealed by evidence from slums in Bangladesh, India and Kenya, are often so insecure about living without men that they opt to stay in abusive relationships with 'real' or 'make-do' husbands.

Age makes a difference to a woman's identity, her responsibilities and her ability to earn an income. It also affects her vulnerability to different health conditions. A large proportion of the urban population is under 18. Children are vulnerable to particular health concerns such as pneumonia and diarrhoeal diseases, malaria and vaccine-preventable illnesses, and road traffic accidents (WHO 2010b). Two-thirds of the world's older people live in so-called developing countries. Africa is estimated to have 50 million older people aged 60 and older and numbers are rising (Falkingham *et al.* 2011). The numbers of older people living in urban areas look set to rise (KNUS 2008). In South Africa, women of 80 years and older outnumber their male counterparts by nearly two to one in urban settings (Chant 2013). Poorer older people are often not prioritised within urban health programmes and few are covered by pensions and other benefits (which tend to favour people in the public/formal sector) (Falkingham *et al.* 2011). South Africa, with an established social security scheme for the whole population, is unusual within Africa. As a result of age bias we know less about the health needs of poorer older people (Harpham 2009). KNUS (2008: 30) suggests that older people are an 'almost invisible socio-economic group' due to the misconceptions that most older people live in rural areas and that life expectancy is low. But older people have particular health needs that should be attended to. They are often entering older age in poor health and living with disabilities and physical impairments within urban communities where kinship or familial support networks are in decline and younger people may themselves be struggling to survive. The responsibility for caring for older dependants often falls upon younger women. For disabled people with movement or sensory disabilities, the geography of poor urban settings – for example, the poor roads and pavements, inadequate lighting and housing density – may create additional barriers to health (WHO 2010b).

Unemployment is a cause of poverty and subsequent ill health. People with better jobs have better health, and employment can bring other benefits such as insurance and pensions (GRNUHE 2010). Furthermore, longstanding unemployment and job insecurity can lead to stress, which exacerbates common mental health concerns and conditions like high blood pressure (GRNUHE 2010).

4.3 The complexity of migration

Mabogunje (2007, quoted in Harpham 2009: 109) categorises the urban poor as, 'new poor (recently retrenched), borderline poor (unskilled, employed but below poverty line) and the chronic poor (lasting at least five years and often caused by the process of transition from rural-to-urban rather than specific urban conditions)'. Refugees, migrants and internally displaced people in poor urban settlements may be particularly vulnerable, as they may be isolated from the health system and other social support systems, beyond the purview of the authorities (Guterres and Spiegel 2012). Research on the drivers and effects of migration represents a complex area of study and it is beyond the scope of this review to reflect this field in any depth. The point that must however be highlighted is that the process of migration can intensify impoverishment and vulnerability, for example to poor health outcomes.

Gulis *et al.* (2004) describe a pattern of migration within Kenya whereby a lack of employment opportunities prompts migration to urban areas. Yet there are too few well-paid jobs to support newcomers to the city who end up working for manufacturing industries and staying in informal settlements. Emina *et al.* (2011) analysed demographic and health data between 2003 and 2009 for residents in the Korogocho and Viwandani 'slums' in Nairobi. In Korogocho, 57 per cent of women and 63 per cent of men had lived there for more than ten years, while in Viwandani the corresponding figures were 25 per cent and 36 per cent, respectively. These figures demonstrate that people in these areas were relatively settled and that they are a permanent rather than a transient resting place. Furthermore, it is well established that divides between the city and rural areas are often blurred and rural–urban linkages are complex and dynamic with cyclical movements in both directions likely.

How people migrate, the planning involved and the contacts that people have in the city can affect their experience of the process and how they access services. GRNUHE (2010) suggests that social capital among migrants is important for finding housing and employment. Those migrants who are connected to others already settled in the city may have better outcomes than those who are not. The effect of migration on fragmenting social support networks is a well established theme in the literature, particularly with respect to mental health. Migration can have negative effects on mental health; however, it is being a *poor* migrant that is particularly problematic (Harpham 2009). As we have noted above, the voices of women living in low-income urban settlements are somewhat silent in the literature that has been reviewed. Some scholars do, however, stress that city life can have its freedoms and pleasures, such as leisure opportunities, new relationships, anonymity and alternative ways of organising households. The benefits of greater independence and a loosening of social norms have been argued to be potentially beneficial for women (Tacoli and Satterthwaite 2013).

4.4 Access to health services

The literature identified by this review contends that while in some instances in low- and middle-income countries access to health resources might improve in urban areas, residents are also likely to be exposed to the problems associated with negotiating a more diverse health care market, evidenced by an array of private and informal health providers of variable quality where payment for care is a potential barrier to access in both the public and private sectors (Harpham 2009; WHO 2010b). While a review of all the factors that impact in general on access to health services is beyond the scope of this paper, we highlight below some of the important issues to bear in mind with respect to the access of poor people in low-income urban areas.

Even where public or private services exist, for example for health and education, the poorest people in urban areas may not have access to them. Lack of official residency status and citizenship in some settings can mean children cannot be registered at school and access to other social benefits is limited (GRNUHE 2010; KNUS 2008). Many of Kenya's

informal settlements came about post-1972 when plots of land were provided to the landless after independence. These did not have ownership or title deeds (Gulis *et al.* 2004). Even where title deeds may exist, inheritance law and practice in sub-Saharan Africa discriminates against women, meaning that women are less likely to own the housing that they live in and therefore access the benefits that follow from this, such as access to finance (Chant 2013).

Sensitivity of the health system to the health needs of people in low-income urban areas may also be inadequate. Some authors have argued that the balance between primary, secondary and tertiary health services may not adequately meet the needs of the inhabitants of poor urban settings. Health promotion and monitoring may be undermined by inadequate systems at community level and emergency services may be hampered by urban density (GRNUHE 2010; KNUS 2008).

The cost of health services is likely to be a barrier to access for those people living in low-income urban settlements. This is particularly true for those people who work irregularly in the informal sector. In South Africa, the cost of state health care is means tested and in some instances free, but the cost of transport to facilities and the time costs of waiting in queues that are notoriously long, can be significant for unemployed or informally employed people. In Kenya it is estimated that of the total workforce, 31.6 per cent are engaged in the informal sector (Kimani *et al.* 2012). Kimani *et al.* studied a random sample of over 16,400 individuals (over the age of 12) from the Nairobi Urban Health and Demographic Surveillance System of residents of the Viwandani and Korogocho 'slums' in Nairobi. They found that 89 per cent did not have any type of health insurance coverage, while only 10 per cent had enrolled in the government's National Hospital Insurance Fund (NHIF) programme (which pays for inpatient costs at selected hospitals). Fewer than 1 per cent were enrolled in private schemes. Being employed in the formal sector was significantly associated with a higher probability of having public health insurance relative to working in the informal sector. In addition:

> a number of factors are significant predictors for participation in the public health insurance program, including employment in the formal sector, participation in social welfare programs (i.e., the national social security fund), participation in microfinance institutions and informal community-based savings groups, and being female. However, being poor, formerly in a union and never in a union were associated with a lower likelihood of participation in the public health insurance program.
>
> (Kimani *et al.* 2012: 5)

5 Themes: specific health issues that affect vulnerable women and girls in the most marginal urban areas

This section discusses the major health issues facing women living in poor urban settlements in Kenya and South Africa and a few interventions that have been identified by the review that aim to respond to these conditions. The health issues include sexual and reproductive health and maternal and child health, HIV and communicable TB, violence and mental distress, non-communicable diseases, and sanitation.

5.1 Sexual and reproductive, maternal and child health

5.1.1 Scale of the problem

Poverty is an important determinant of sexual and reproductive health, maternal and child health. Harpham (2009) asserts that on the whole contraceptive use among 'poor urban women' is not much different from that of their rural counterparts but is lower than for women from better-off socioeconomic groups. However, in Nairobi, Okech *et al.* (2011) found that contraceptive use is much less frequent in low-income urban settlements in Kenya compared to the national average. With respect to sexual health, the authors of studies in Nairobi have argued that evidence from their studies suggests that poor girls and women are more likely to be involved in sexual behaviours that expose them to the risk of unwanted pregnancy and STIs (including HIV) (Erulkar and Matheka 2007; Zulu *et al.* 2002). It is important to note here the importance of not neglecting the sexual and reproductive health of girls. Ideally services should take account of specific adolescent needs and vulnerabilities in this regard.

Among urban women, vulnerability to sexual and reproductive ill health is not spread evenly. Few studies of any description focus holistically on the health-related vulnerabilities of gay, lesbian, bisexual and trans people within poor urban settlements, although an acknowledgement of the vulnerability of men who have sex with men to HIV infection has increased the evidence base in this particular area. Violence against lesbian, bisexual and gender non-conforming women in urban South Africa on the grounds of sexuality or gender presentation is prevalent, with organisations such as Sonke Gender Justice drawing attention to the problem. We were unable to identify literature from Kenya that addressed this issue. Studies from the United States of women who have sex with women demonstrate that they may find it more difficult to access health services and that they may be more likely than their heterosexual counterparts to use tobacco, consume alcohol heavily, or be overweight (Herrick *et al.* 2010). Despite having a lesbian identity, many women in Herrick *et al.*'s (2010) study had sex with men and engaged in sexual practices that could put them at risk of STIs, yet sexual and reproductive health services were not necessarily tailored to their needs. In South Africa, Henderson and Cloete (2011) found that there were multiple layers of exclusion, including the exclusion of lesbian and bisexual women from HIV and sexual health research, policy, programmes and services. In addition, they noted the marginalisation of women living in rural and peri-urban areas in relation to both research and access to resources. In Kenya, as in other low-income countries, sex workers are more vulnerable to HIV infection than their non-sex-working peers (Odek *et al.* 2009). Wojcicki (2002) found that low-earning sex workers in South Africa failed to access health interventions as they did not adopt the identity of sex worker for themselves. This observation points to the importance of interventions that focus on the most marginalised, however they define themselves.

In terms of maternal health in urban areas, an extensive study covering 23 sub-Saharan African countries (Magadi 2004) found that:

- Physical proximity to health facilities did not necessarily guarantee access by the urban poor, who are often constrained by economic deprivation and unwillingness to take time off from income-earning activities.
- Throughout the region, maternal health care for the urban poor was better than in rural areas, but worse than care for the urban non-poor.
- Poor urban women were more likely than the non-poor to initiate antenatal care late in pregnancy, make fewer visits to a health facility during pregnancy, and to deliver without skilled attendance.

In the low-income settlements of Viwandani and Korogocho in Nairobi, Fotso *et al.* (2008) used survey data collected from 1,927 women in a DSS (Demographic Surveillance Site) catchment area to better understand behaviour related to maternal health. The data showed that, despite the availability of services, 48 per cent of women made less than the recommended four antenatal visits (this is higher than the rate observed in rural areas). Education and wealth were associated with earlier and more frequent use of antenatal care. In terms of delivery care, nearly 70 per cent of women 'delivered at health facilities, a figure which is comparable to that of Nairobi as a whole (about 78 per cent), only about 48 per cent delivered in facilities with at least the minimum standards (those referred to as "appropriate")' (*ibid.:* 435). A survey of the health facilities demonstrated that inappropriate clinical settings were not registered, supervised or regulated and they lacked trained staff, equipment and medication (*ibid.*). The authors conclude that the reason women delivered in inappropriate settings was that these were nearby. Furthermore, the cost of accessing other services was a deterrent. Other authors have noted that very few facilities near low-income settlements have had the capacity to offer emergency obstetric care (Ziraba *et al.* 2009).

Izugbara and Ngilangwa (2010), in a qualitative study, found that although urban poor women in Nairobi associate poverty with adverse maternal outcomes, their accounts and lived experiences of the impact of poverty on maternal outcomes underscored dynamics other than those typically stressed in the extant quantitative studies. To them, poverty primarily generated adverse maternal outcomes by exposing women to exceedingly hard and heavy workloads during pregnancy and the period surrounding it; to intimate partner violence; as well as to inhospitable and unpleasant treatment by service providers. They concluded that to deliver better outcomes, current efforts to promote better maternal outcomes needed to be guided by a more thorough perspective of the link between women's livelihoods and their health and wellbeing.

Regarding child health in urban areas, it has been noted that children are more vulnerable to ill health in low-income settlements. Garenne (2010) has argued that most cases of excess urban mortality are the result of lack of state involvement, which has translated to a lack of environmental and sanitary regulations, lack of equipment (water and sanitation), lack of hygiene, lack of health infrastructure and personnel, and a lack of preventative medical and health education. Data from 42 low- and middle-income countries (from 2000 onwards) demonstrates that, 'the poorest urban children are twice as likely as the richest urban children to die before the age of five years' (WHO 2010b: 41). This is the case among the urban poor in Nairobi, where rates of child mortality are higher than the national average and the rate in rural areas (Amuyunzu-Nyamongo *et al.* 2006). The social determinants of mortality cannot be overemphasised: 'In most low-income and many middle-income nations, infant and under-five mortality rates in urban areas are five to 20 times what they would be if the urban populations had adequate nutrition, good environmental health and a competent health care service' (KNUS 2008: 14).

The way in which people seek care for their children as well as the services available are crucially important. A study of mothers' health care-seeking behaviour on behalf of their children was conducted in Kawangware, Korogocho, Viwandani and Njiru low-income settlements in Nairobi (Amuyunzu-Nyamongo and Nyamongo 2006). Through conducting in-

depth interviews with 28 mothers whose under-five children had been sick in the previous three months, researchers found that the leading reported causes of illness were respiratory infections, diarrhoea and malaria. In cases of child sickness women would either purchase medicine from private shops or visit public or private health facilities. The availability of money to pay for services was mentioned as a determining factor in their choice of care pathway and sometimes led to delays in seeking help. The women waited for their child's illness to go away and/or tried to treat it at home, for example by administering paracetamol to try to reduce fevers. While the women in the study expressed a dislike of private facilities in low-income settlements, which they felt were expensive and did not have well-trained staff, they were also negative about public facilities, stating that these tended to lack properly trained staff, basic amenities and appropriate medication. The authors of this study identify the need for training of mothers and potentially private sector providers so that they can recognise and seek/supply appropriate care for potentially life-threatening conditions. They also call for greater regulation of the private health sector.

Some children are more vulnerable to ill health than others. Harpham (2009) suggests that street children experience skin diseases, respiratory problems and infectious diseases because they are exposed to 'a particularly corrosive physical environment' and they can experience sexual and reproductive health problems and ill health associated with drug use (Harpham 2009: 111). One study (Kaime-Atterhög *et al.* 2007) of street children from Nakuru, the fourth largest town in Kenya, focused on 115 boys under 18 years (the authors found girls and young women much harder to identify and approach). These boys lived independently of their families, although often in groups together, and made an income through the informal economy, begging and illicit activities such as theft. Through participant observation, group discussions, interviews, clinical reports (of treatment for STIs) and home visits the authors discovered that all the children aged ten years and older were engaged in consensual heterosexual sex, which was considered an important opportunity for pleasure and bonding. Instances of forced homosexual activity instigated by older boys and men were mentioned, although none of the study participants reported that it had happened to them. Adults, such as a soup kitchen coordinator who regularly interacted with the children, noted that commercial sexual encounters with older women were common, although none of the boys in the study reported that they had engaged in this type of relationship. The children were able to access free unlimited condoms from nurses in the town, which they said that they used. Self-reporting was reinforced by relatively low rates of STIs within the group. Those who had experienced STIs tended to delay treatment because of the cost, at least until their symptoms were very painful. At this stage they would raise the cost of treatment among themselves. Even where health services were free, at the Municipal Hospital, the boys still had to pay for medication. It is likely that girls in such situations would also be very vulnerable.

The review failed to uncover literature dealing with some of the more neglected and contested issues in sexual and reproductive health, particularly in Kenya, such as access to abortion, and morbidity and mortality associated with unsafe abortion, information on sexually transmitted infection, or on miscarriage and post-natal depression. The term 'how to abort' was the number one trending internet search term in 2012 in Kenya, according to Google Zeitgeist (Mwakilishi.com 2012). This suggests that although the issue is not one extensively covered in academic studies of urban health, it is of importance to people living in Kenya.

5.1.2 Interventions and gaps

Harpham has described the lack of research on reproductive issues in urban areas as 'remarkable' (Harpham 2009: 111). Maternal health in Africa has been much researched, given the slow progress of many countries towards Millennium Development Goal 5, and yet these studies have not been focused on urban areas in the main (Fotso *et al.* 2008). Generally, there is a dearth of literature on interventions or evaluation of interventions for

sexual and reproductive health (SRH) and maternal and child health in urban areas of Kenya and South Africa and the larger eastern and southern African region. In an evaluation of interventions that sought to improve primary health care in Dar es Salaam (Tanzania) and Lusaka (Zambia), Few *et al.* (2003) found that the interventions had realised gains in capacity building (staff gained from training programmes in management and planning), and increased staff ownership of the programmes. Specifically, the interventions had sought to strengthen urban primary health care in the public sector and make it more inclusive in a dual sense by making quality services more accessible to the poor, and fostering community involvement in health care and health-related activity. However, the interventions did not improve community ownership of primary health care programmes. Further, the authors found that while the interventions improved health infrastructure, they did little to improve quality of care, as this is dependent upon the broader context of factors such as low staff pay and poor drug supply. Neither of the two urban settings demonstrated greater capacity in stimulating community involvement and generating intersectoral action for improved primary health care provision.

Poverty may constrain women's ability to control their sexuality. Microfinance schemes, which aim to increase women's financial independence, have been posited as empowering women. An intervention spearheaded by the Population Council, together with partners, sought to provide safe spaces, financial education and investments for adolescent girls in Kibera low-income settlement in Kenya. It is argued to have strengthened girls' social networks, provided them with financial and health education, and protected them from vulnerabilities, including health vulnerabilities (Austrian 2011). The intervention included a mobilisation of girls' savings groups and the design of financial products for adolescent girls. Thus, through the intervention, adolescent girls were mobilised to open bank accounts and encouraged to save regularly. In addition, the programme provided the girls with financial and reproductive health education, as well as leadership and personal skills training. The girls' savings groups formed offered girls safe spaces for networking with other girls as well as platforms for skills training. Austrian (2011) has argued that girls in this programme were better informed on SRH issues than those not in the programme.

Some studies have speculated that microfinance schemes may also have beneficial health outcomes where they increase women's income so that they are not reliant on their male sexual partners. The evidence for the success of these schemes requires careful consideration. An evaluation in Kibera, Kenya, assessed the effects, at an individual level, on 307 women of (a) credit for small business activities (approximately US$200 over one year at 15 per cent interest); (b) business skills training and mentorship; and (c) promotion of a savings culture to an existing peer-led HIV prevention intervention for female sex workers. By the end of the intervention 46.4 per cent of women said that they had stopped working in sex work, and self-reported condom use with all regular partners increased from 78.9 per cent at baseline to 93.5 per cent at endline survey and remained at a high level (above 90 per cent) with casual partners.

Whether or not this intervention had any effect on participants' health status was not known. The intervention did not use a proxy group so it is difficult to say whether the microfinance scheme affected individual behaviour or whether the reduction of women self-reporting working in the sex industry and using condoms would have decreased in its absence. Furthermore, the women who self-selected for the study tended to be in their 40s, in contrast to the majority of women engaged in selling sexual services on the street in Kenya. Thus, the women taking the loans may have wished to retire from sex work and the scheme provided them with an alternative way of earning an income. Women who received a loan reported that 80 per cent was invested in a business, for example selling fruit and vegetables, manufacturing clothing or hairdressing. Two-thirds of these businesses were still operating by the end of the intervention. However, the authors note that previous studies in Kenya have shown that only 15 per cent of new micro-enterprises are still operational after five

years. It is unclear that programmes that seek to shift women from one income-generating source (i.e. sex work) to another that is precarious (i.e. micro-enterprises) will have a beneficial effect on health outcomes. Further research in this area is needed.

There are gaps in existing knowledge on some of the key issues that affect girls and women such as abortion, sexual and gender-based violence, sexually transmitted infections (STIs), and human rights as they relate to reproductive health. In addition, the existing literature is mainly quantitative in nature, which largely silences the voices of people who live in low-income settlements, including girls and women. The existing knowledge reviewed on sexual, reproductive, maternal, and child ill health consistently shows that girls and women in poor urban settings in Kenya and South Africa face enormous health challenges relating to these issues.

5.2 Communicable diseases

5.2.1 Scale of the problem

A wide range of surveillance data shows that urban areas in sub-Saharan Africa exhibit higher rates of HIV prevalence than rural areas, despite the fact that urban residents tend to show greater awareness of HIV/AIDS issues and of ways of avoiding infection (Zulu *et al.* 2002; van Donk 2002). Furthermore, global data suggest that HIV prevalence among urban women is 1.5 times higher than for urban men and that low socioeconomic status tends to further compound this problem for women living in urban areas (WHO 2010b).

In South Africa, research has shown that the HIV prevalence in populations in low-income 'township' settlements is double (or more) than that in populations not living in such areas (Rehle *et al.* 2007). Similarly, in Kenya, Madise *et al.* (2012) found that HIV prevalence was 12 per cent among Nairobi 'slum' residents, compared with 5 per cent and 6 per cent among non-slum urban and rural residents, respectively. They found that men had lower HIV prevalence than women although in the 'slums' the gap was narrower. This is in line with epidemiological data for sub-Saharan Africa, which consistently show that women have a higher HIV prevalence than men, accounting for 58 per cent of people in the region living with HIV in 2011 (UNAIDS 2012). Given this vulnerability of women to HIV infection, Mabala (2006) has argued for the need to revisit HIV prevention interventions, especially in urban areas, largely on account of the current focus on behaviour change interventions instead of addressing the underlying issues of poverty, gender inequity and lack of social cohesion that continue to fuel the epidemic. Regarding HIV knowledge among vulnerable groups in urban areas, various studies have found poor knowledge levels on HIV among vulnerable groups in urban areas. Ochako *et al.* (2011) found that while comprehensive HIV knowledge is low among urban young women in Kenya, this had increased significantly from 9 per cent in 1993 to 54 per cent in 2008/2009. Focusing on sex work in South Africa, Peltzer *et al.* (2004) found an inadequate knowledge of HIV prevention methods and some incorrect beliefs about HIV transmission among female sex workers. Furthermore, most sex workers reported inconsistent condom use.

The provision of care is an important area to consider in the context of a lifelong chronic illness such as HIV. A study that explored the impact of HIV-related sickness and the provision of care in South Africa found that female migrants played a pivotal role in the provision of care, disrupting their productive livelihood roles within the city in order to return home to provide care (Carrasco *et al.* 2003). They concluded that the 'relatively higher and culturally prescribed willingness and availability of women – particularly wives or female partners – to return home to provide care shows that care remains a commodity which is gendered female' (Carrasco *et al.*: 113). In South Africa, politicians have spoken of HIV-positive migrants from poorer provinces moving explicitly in order to seek better access to drug treatment in better resourced provinces and in urban areas in particular. Anecdotal accounts suggest that people who are HIV-positive and sick make decisions to move to seek

networks of care that involves moving in both directions between rural and urban areas. More research is needed in this area, given also the implications for health-seeking and rural urban migration patterns for the growing burden of other chronic lifelong illnesses.

Izugbara and Wekesa (2011) conducted in-depth interviews with 48 people living with HIV from Viwandani and Korogocho in Nairobi for a study on patients' perceptions of treatment compliance. Their study participants were receiving antiretroviral treatment (ART) from health care facilities and care organisations. The interviewees described how HIV-related stigma impacted on their lives and livelihoods in these low-income settings of the city:

> Respondents were gossiped about, discriminated against, openly avoided, and were sometimes targets of violence... People reportedly did not like to eat, work, and live with PLWHA [People Living with HIV and AIDS]. Or to buy from and sell to them on grounds that they could infect others in the process. Participants reported that when friends, partners, and family members learned of their HIV-positive status, they began to avoid them, chased them away, or refused further association with them. Some respondents also reported that they were sacked when their employers learnt they were HIV-positive.
>
> (Izugbara and Wekesa 2011: 874)

The authors argue that in settings where social capital and informal networks are crucial to survival and wellbeing, HIV-related stigma and discrimination can undermine people's ability to support themselves and live well with HIV, even when treatment is available. A major reason for treatment compliance among the participants was to remain healthy and therefore economically productive and 'healthy-looking' in order to prevent them being rejected by their employers and communities. Avoiding rejection was also a reason for treatment non-compliance (people tried to hide their pill-taking from people who didn't know about their HIV-positive status), along with the cost of treatment.

In South Africa, a study in Cape Town that identified risk factors for ongoing community transmission of TB (tuberculosis) in two densely populated urban communities with a high incidence rate of TB, found that the area had a higher incidence and proportion of TB cases than reported elsewhere in the country (Verver *et al*. 2004). The study attributed a majority of TB cases in the area to ongoing community transmission, and only a very few to reactivation (*ibid.*). The overcrowded living conditions in such communities, fuelled by poverty, have for decades contributed to the endemic nature of TB. In the same city in South Africa, a 2005 report by *Médecins Sans Frontières* (MSF) indicated that the majority of patients at an MSF TB/HIV clinic were women (MSF 2005). It was observed in the report that, in South Africa, the average TB and HIV patient is a woman in her twenties, who often has children, some of whom are also HIV-positive (*ibid.*). The gendered nature of testing in antenatal clinics contributes to this profile. Lawn *et al*. (2006), in a study that sought to understand the epidemiological relationship between HIV and TB in a peri-urban community in South Africa, found that HIV infection was driving the TB epidemic in this population. The use of the DOTS (Directly Observed Therapy) strategy alone emerged as insufficient. TB notifications have reached unprecedented levels, and additional targeted, age-specific interventions for control of TB and HIV infection in such populations are needed (*ibid.*).

5.2.2 Interventions and gaps

Given the extent of HIV and TB infection in many African countries, various interventions have been trialled in urban areas in response to the challenge. In Kenya, an evaluation of an intervention that provided social support, and savings and microcredit opportunities for poor girls in a Nairobi 'slum', concluded that at the end of the programme the girls were better able to negotiate safer sexual relationships, and held more liberal gender-role attitudes than girls who did not participate in the programme (Erulkar *et al*. 2006).

In South Africa, an evaluation of community treatment supervision as part of a TB control programme in Cape Town found that community health worker support contributed to better TB control programme performance than an approach based exclusively on health facilities (Dudley *et al.* 2003). The intervention recommended the need for clear government policy and support for lay health worker programmes in TB control. Still in Cape Town, a review of HIV/TB interventions in Khayelitsha, an urban poor community that has been hard hit by the HIV pandemic, attributed the success in scaling up HIV/TB service provision to the collaborative efforts of service providers, policymakers, academics, civil society and the community at large (Garone *et al.* 2011). It was claimed that the programme had successfully achieved community buy-in because it offered a reliable service within the community, was supported through partnerships, and was complemented by widespread treatment literacy (*ibid.*). The review further argued that increased funding for antiretrovirals and the resulting increase in access to care had helped to strengthen the overall health system. In addition, it was argued that the implementation of a large-scale TB/HIV programme had resulted in decreased rates of both illnesses and mortality among people living with HIV, as well as a reduction in the number of new HIV infections (*ibid.*).

Given the argument that HIV infection is considerably driven by poverty, some more recent interventions have focused on cash transfers to poor families as a way of preventing poor girls in these families from becoming HIV-positive. A World Bank intervention in Malawi provided cash transfers to families of adolescent girls with the aim of cushioning the girls against early sex and therefore protecting them from HIV infection. It is argued that this intervention had likely lowered HIV infection among adolescent girls (Baird *et al.* 2012) although this remains a subject for debate. On the other hand, Kohler and Thornton (2011) found that conditional cash transfers given to poor men and women in rural Malawi to maintain their negative HIV status had no effect. Indeed, they found that shortly after receiving the transfers, men who received them were 9 percentage points *more* likely and women were 6.7 percentage points *less* likely to engage in risky sex. They concluded that conditional cash transfer programmes that aim to motivate safe sexual behaviour in Africa should take into account that money given in the present may have much stronger effects than rewards offered in the future, and any effect of these programmes may be very sensitive to the specific design of the programme, the local and/or cultural context, and the degree of agency an individual has with respect to sexual behaviours (*ibid.*).

In South Africa, an impact assessment of the country's Child Support Grant found that the programme significantly reduced six main risky behaviours among adolescents, particularly for girls, including sexual activity, pregnancy, alcohol use, drug use, criminal activity and gang membership (Department of Social Development, South African Social Security Agency and UNICEF 2012). In Kenya, a recent unpublished study claims that the country's cash transfer programme for orphans and vulnerable children had increased the age of sexual debut among adolescents (Handa *et al.* 2012). The study concluded that a large-scale, national cash transfer programme could prevent HIV among adolescents by postponing sexual debut, reducing the number of partners, and reducing the number of unprotected sex acts.

Overall the evidence from cash transfer programmes is mixed and contested, pointing to the need for more evaluations to ascertain the effectiveness of these schemes. Even then, there are arguments that cash transfer programmes should complement existing behaviour change programmes, access to health services and commodities, and interventions to reduce stigma and discrimination. Indeed, a review of behaviour change interventions (these usually include a combination of education, motivational counselling, skills building, condom promotion, risk reduction planning, and improved sexual and reproductive health services) found that behaviour change interventions, by themselves, had been limited in their ability to control HIV infection in women and girls in low- and middle-income countries (McCoy *et al.* 2009). Furthermore, young people in low-income urban settlements may perceive sex as a positive

and pleasurable element of their lives (for example, see Kaime-Atterhög *et al.* 2007) and interventions that recognise this and work to support safe sex may have greater chance of effectiveness if this is the case.

Despite the vulnerability to HIV of poor people living in informal settings in urban areas, Vearey *et al.* (2011) found that South Africa's HIV programming ignored migrants working in informal workplaces in HIV prevention initiatives, yet migrants working in these workplaces were at a higher risk of HIV infection. Overall the balance of literature identified suggests that the HIV and TB challenge in urban areas in South Africa has been extensively studied, while in Kenya this has received less attention.

5.3 Violence and mental distress

5.3.1 Scale of the problem

Violence, and the threat of violence, is a common problem in urban areas. WHO (2010a, 2010b) note that in Nairobi more than half the residents worry about crime all the time or very often. This fear of violence erodes trust and can limit mobility. A recent review of literature on violence in urban areas of the developing world found that social and income inequalities, in particular, were highly correlated with differential rates of violence across and within cities, as compared to per capita income which does not have a clear effect (Muggah 2012). Furthermore, legacies of armed conflict, political authoritarianism and repressive policing were also routinely associated with the onset and persistence of urban violence (*ibid.*). Studies suggest that women in low-income urban settlements are at risk of physical and sexual violence (WHO 2010b).

In Nairobi, Kenya, Amnesty International (2010) found that for many women living in informal settlements, poverty was both a consequence and a cause of violence. Many women who suffered physical, sexual or psychological violence lost income as a result and their productive capacity was impaired due to illness or disability. Violence against women also impoverished their families, communities and societies. Amnesty International argued that the violence women face contributes to keeping them poor, in part because poverty inhibits their ability to find solutions. Others have pointed out that violence can inhibit women's mobility, which may also have an impact on their ability to earn an income (Frye *et al.* 2008). Furthermore violence can lead to segregation and schisms within communities that affect trust, social capital and the bonds between community members, and this may undermine mutual support mechanisms in low-income urban settlements (KNUS 2008).

In South Africa, a qualitative study that explored how the reality of everyday life in urban areas affects young men's perceptions of risk in relation to HIV/AIDS, concluded that gang and street-level violence within communities, as well as high levels of sexual violence among young people, needed to be seriously considered as situational elements affecting the ways young men construct their identities and HIV vulnerability (Walsh and Mitchell 2006). They emphasised the need for interventions to take into consideration young men's lived experiences in relation to violence, by going beyond only seeing boys as perpetrators of sexual violence and gang violence, to consider their experiences as a way to begin to unpack boys' own constructed masculine identities (*ibid.*). Considering the experience of men and working with men as an approach to dealing with violence is likely to also have benefits for women and girls.

KNUS (2008) provides a list of the issues that predispose the residents of low-income urban areas to mental ill health. These include: lack of control over resources and inadequate financial resources; exhaustion; inadequate living conditions; lack of social support; long-term chronic stress; and exposure to stressful events. Common mental disorders, such as depression and anxiety, are twice as common among women as compared to men in low-income urban settings (Harpham 2009). Describing an unpublished study by the University of

Cape Town, Harpham explains that the prevalence of common mental disorders was significantly higher in peri-urban areas compared to the rural poor population. The risk factors in urban areas included being unemployed, being female and 'substance' abuse (which we assume refers to illicit street drugs, but could include alcohol).

Alcohol misuse is commonly associated with violence and in low-income urban settings has been identified as a cause or a consequence of mental ill health as well as being a cause of injuries (KNUS 2008). A study of the common mental health and substance use problems in a disadvantaged urban and rural community in South Africa found a high prevalence of mental health and substance use problems. The study concluded that mental health and substance use problems constitute a considerable burden of disease among disadvantaged communities in South Africa (Havenaar *et al*. 2007). Another study in South Africa that assessed the prevalence of psychological distress and associated factors among outpatients in an urban hospital found a high prevalence of psychological distress among hospital outpatients (Peltzer *et al*. 2012).

5.3.2 Interventions and gaps

Muggah (2012: ix) found that the most effective interventions in tackling urban violence appeared to 'envision qualified repression and socio-economic support as complementary rather than competing objectives' (repression here refers to approaches such as policing). Muggah (2012) further reviewed a small sample of the more prominent types of interventions including pacification and community policing, targeted investments in at-risk population groups, support for social cohesion, urban renewal and gentrification, slum upgrading and investments in urban governance. He found that certain forms of pacification and slum upgrading interventions in particular had yielded positive gains and that more narrowly constructed law and order actions and employment schemes produced less certain outcomes. He, however, concluded that the evidence base of what works and what does not in tackling urban violence is extremely thin.

5.4 Non-communicable diseases, nutrition and the food environment

5.4.1 Scale of the problem

Non-communicable diseases (NCDs) have been on the rise in low- and middle-income countries in the last few years. It is indeed estimated that current and projected growth in mortality rates from NCDs is mainly in low- and middle-income countries (GRNUHE 2010). It is further noted that the burden of NCDs in low- and middle-income countries is disproportionately affecting poor people living in urban settings (Mayosi *et al*. 2009). Obesity has been singled out as one of the most challenging health concerns to have arisen in recent decades, particularly for socially disadvantaged groups living in urban areas (Friel *et al*. 2007). A study in India that examined the relationships between urbanicity and chronic disease risk found that urbanicity was negatively associated with physical activity (Allender *et al*. 2010). A systematic review of studies evaluating the effects of rural-to-urban within-country migration on cardiovascular (CV) risk factors in low- and middle-income countries concluded that most, but not all, CV risk factors are higher or more common in migrants than in rural groups but lower or less common than in urban groups (Hernandez *et al*. 2012). In many societies women are more prominently involved in the purchasing and preparation of food, and education programmes or community health worker recruitment for nutritionally related NCDs tend to focus on women in particular. In addition, in areas that are unsafe, it is difficult for women to exercise. Moreover, a heavy burden of poorly treated NCDs in the context of inadequate social support systems also leads to a situation of old and even not-so-old relatives unable to work and requiring care as a result of disability. In instances where

that care role is culturally expected of women, as in many parts of sub-Saharan Africa, this can be a significant burden and even cause women to cease work themselves.

In South Africa, a community-based participatory research project in Khayelitsha, a low-income settlement in Cape Town, that sought to identify factors that contribute to hypertension and diabetes revealed a lack of knowledge among community health workers and the community about hypertension and diabetes and the risk factors for these NCDs (Bradley and Puoane 2007). Further, it established that the availability of healthy food options in the food environment in this setting, economic constraints and cultural beliefs and practices influenced the community's food choices and participation in physical activity (*ibid.*). In another study that examined the experiences and perceptions about NCDs of people who migrated from *rural* areas to *urban* Cape Town, it was revealed that study respondents acknowledged changes in eating patterns and levels of physical activity, which they attributed to socioeconomic and environmental constraints. Even then, the study found that the respondents were not concerned about these changes, and despite hardships, they were pleased with their *urban* lifestyle (Stern *et al.* 2010). Furthermore, the respondents approved of the weight gain that had often occurred through adopting urban life, because it signified dignity and respect. The study, however, noted that respondents who attended health clubs found them informative and socially and emotionally supportive. The study highlighted the complexity of the risk factors for NCDs and the need to develop prevention strategies that extend beyond the traditional focus on diet and exercise and individual behavioural change. Suggested areas of focus include addressing socioeconomic and environmental constraints, such as limited food choices in the 'food environment', high transportation costs to and from the nearest supermarket, and lack of opportunities to engage in physical activity (*ibid.*).

Another study in South Africa found that urbanisation among Africans was accompanied by an improvement in micronutrient intakes and status, but also by increases in weight, obesity and several risk factors for NCDs (Vorster *et al.* 2005; Vorster 2002). The study recommended that intervention programmes to promote nutritional health should aim to improve micronutrient status further without leading to obesity.

5.4.2 Interventions and gaps

To address NCDs, interventions need to create awareness among poor urban residents of NCDs as well as facilitate improved urban planning and an intersectoral policy environment that can potentially assist in simultaneously reducing poverty, encouraging physical activity and social cohesion, and reducing health inequity (Bradley and Puoane 2007; GRNUHE 2010). With respect to improving nutrition and food security, it has been argued that interventions at the city or sub-city level may be hampered by international forces beyond the control of communities and decision-makers, even to some extent at municipal and national levels (GRNUHE 2010). Local decision-making, for example about food markets and agricultural employment, is increasingly affected by globalisation. The intervention in Khayelitsha with community health workers, designed as part of Puoane's research at the University of the Western Cape in South Africa, was the only initiative that we identified in the published literature that aimed to address NCDs in poor urban settings in Kenya or South Africa. Our search did not reveal any studies in Kenya on NCD interventions.

5.5   Sanitation

5.5.1   Scale of the problem

Poor sanitation is a major challenge in poor urban settlements in many developing countries. A 2008 UN Joint Monitoring Programme report noted that one billion people still use unimproved water facilities and two and a half billion are not benefiting from improved sanitation (WHO and UNICEF 2008). A report by IWSD (Institute of Water and Sanitation Development) that assessed the needs of poor communities in Zambia, Zimbabwe and

South Africa, found that a majority of the residents in the informal settlements used unimproved pit latrines as toilets. Where there was access to flush toilets, there were problems of gross overcrowding at communal facilities. In addition to poor latrines, the urban poor also faced solid waste and drainage problems. The study found no household refuse collection in any of the study areas.

In Kenya as a whole, a 2006 study commissioned by the World Bank concluded that up to 68 per cent of residents in low-income settlements in Nairobi relied on shared toilet/latrine facilities, and that up to 6 per cent of all 'slum' residents in Nairobi did not have any toilet facilities at all (Gulyani *et al.* 2006). The water and sanitation regulators (i.e. the Nairobi Water and Sewerage Company and the Athi Water Services Board) have estimated that only 24 per cent of residents in Nairobi's informal settlements (with a total population of up to 2 million) have access to toilet facilities at a household level (Amnesty International 2010). Looking specifically at the Korogocho and Viwandani 'slums' in Nairobi, Emina *et al.* (2011) found that only 6 per cent of households had access to piped water in their homes in 2006. As a result they were reliant on private vendors of water and paid very high prices for water contaminated with refuge and sewerage. From 2006 to 2009, the majority of households shared pit latrines with other households; only about 3 per cent in 2006 and 1 per cent of households in 2009 had private toilets. This data demonstrated that water and sanitation conditions were actually deteriorating over time (*ibid.*).

Girls and women are more affected by poor or absent sanitation facilities than men. They are more likely to be expected to perform the physical and arduous task of collecting water, for example from communal standpipes (Chant 2013). Drawing on Joshi *et al.* (2011), Chant (2013: 20) suggests that:

> being unable to fulfil norms of personal hygiene (not least to be able to present for employment) or failing to maintain clean dwellings (in accordance with norms of 'good housewifery') is just as stressful to slum-dwelling women as is a lack of sanitary facilities for themselves or visitors.

Amnesty International (2010) found that beyond the direct health risks of poor sanitation, lack of sanitation facilities in Nairobi's slums exposed girls and women to insecurity and the risk of gender-based violence since they had to walk long distances at night to use the limited sanitation facilities in these communities. The lack of adequate sanitation facilities also makes it difficult for women and girls to adequately address personal hygiene during menstruation.

5.5.2 Interventions and gaps

An evaluation of ongoing sanitation interventions in Nairobi (Kenya), Chittagong and Dhaka (Bangladesh), and Hyderabad (India) found that the programmes provided 'inappropriate sanitation', or demanded personal investments in situations of highly insecure tenure, and/or taught 'hygiene practices' that related neither to local beliefs nor to the ground realities of a complex urban poverty (Joshi *et al.* 2011). The three-year ethnographic evaluation study in the four cities illustrated that excreta disposal systems, packaged and delivered as low-cost 'safe sanitation', did not match the sanitation needs of a very diverse group of urban residents. As such, interventions delivered through these programmes were neither appropriate nor used, and were not sustained beyond the life of the projects. They concluded that effective interventions needed to resolve the 'technical, financial and ethical discrepancies relating to sanitation for the urban poor' (Joshi *et al.* 2011: 91).

In South Africa, an assessment of users' experience of sanitation technologies in the early post-implementation phase (when opportunities for remedial intervention are still available) found that user training was positively associated with higher levels of facility maintenance as well as satisfaction with its functionality (Roma *et al.* 2010). The assessment concluded that

early post-implementation assessments of users' experience could enhance the process of acceptance and management of sanitation technology.

6 Interventions to improve the health of women and girls in urban areas

In conducting this review we have found evidence of interventions that aim to improve urban health but these are not necessarily implemented with a gendered lens. Interventions with a broad multisectoral emphasis (projects like Healthy Cities, which engage stakeholders beyond the health sector and government), as well as interventions based on community leadership and participation that acknowledge power relations and governance, are given prominence in the literature. The urban health literature calls for interventions which go beyond health sector responses to also address the social determinants of ill health, such as cash transfers, equity-focused urban planning, income redistribution and law and policy reform.

6.1 Beyond the health sector

There is a general agreement that health-focused interventions alone will not address the urban health challenge experienced in developing countries (Vearey *et al.* 2010, 2011; Zulu *et al.* 2011; Unger and Riley 2007; Vlahov *et al.* 2005, 2007). Rather, interventions and policy solutions that seek to respond to the urban health challenge must be intersectoral and must seek to address the underlying political, economic and social forces that create and perpetuate ill health in poor urban settlements as well as the daily living conditions within these settlements (Zulu *et al.* 2011; WHO 2008; Harpham and Molyneux 2001). For example, Gulis *et al.*'s (2004) analysis of a 5 per cent random sample of clients from the Mukuru 'slum' in Nairobi who used the Trnava University clinic found that the self-reported health complaints of visitors were cough, abdominal pain, and headache for both sexes. The most frequent diagnoses were acute respiratory infections and bronchitis. Their conclusion was that rather than a disproportionate focus on illnesses such as HIV, TB and malaria, interventions within informal settlements should be led also by the health complaints experienced there and shaped to overcome the inequality that is a cause of this ill health. Furthermore, '[v]ery high prevalence of respiratory complaints and gastrointestinal problems suggest that improvement in air pollution, drinking water provision, and waste management in slums can lead to more significant and sustainable improvement in health status than just simple treatment' (Gulis *et al.* 2004: 226). These findings have led the authors to conclude that, in terms of interventions, social and economic assistance would be more beneficial than the provision of standalone health services. Harpham and Molyneux (2001) argue that a focus on the economic, sociocultural and economic risk factors is key to tackling the 'double burden' of communicable and non-communicable disease.

Dye (2008: 768) argues that understanding the health concerns most troubling to the inhabitants of poor urban settlements is only part of the challenge:

> The tough problem is that technical solutions need a framework in which they can be executed. Hence, the call for 'healthy governance', regulated land ownership, probity in financial investment, social cohesion, the empowerment of civil society, and foresight in planning the physical environment. The right structure is hard to create because there are no recipes for social cohesion and good governance.

6.2   Improved intersectoral action and a focus on inequalities

Much of existing urban health research has focused on living conditions and proposes interventions that seek to address these. Vlahov *et al.* (2005), for instance, suggest that urban health interventions must consider health in its totality, and particularly focus on the social, economic and physical characteristics of cities that affect health. However others suggest that this premise is perhaps what has informed efforts by developing countries, with the support of some donors, that have focused on addressing material poverty in urban areas by improving housing, infrastructure and access to clean water, without addressing the underlying factors that push people into low-income settlements (Stephens 2011).

KNUS (2008) suggests that one promising intervention is health-focused urban planning that purposefully seeks to improve health while accommodating urban growth and upgrading low-income settlements. KNUS acknowledge that some existing planning systems can actually increase inequality, for example if governments try to prevent squatter settlements and as a result place greater pressure on existing housing stock or if housing controls are vulnerable to corrupt practices. Harpham (2009: 110) provides two illustrative examples of housing interventions that left the beneficiaries worse off as a result:

> One study reported increases in standardized mortality rates in the re-housed residents. This was attributed to a doubling in rents, which in turn affected the households' ability to buy an adequate diet. More recent work in Stepney (London) also reported that rents in the new houses increased by an average of 14.8%, and some residents reported this as a barrier to employment opportunities. Some residents reported economizing on food to accommodate the increase in rent.

Criticising a focus on the environment alone, Stephens (2011: 35) has argued that 'although improved infrastructure can improve health outcomes, urban inequalities and inequity are rooted in the social and political processes of urban centres and are often linked to deep historical processes of racial, religious and social exclusion'. The importance of tackling inter-urban inequity is an argument made by Harpham and Molyneux (2001: 124) in their review of the literature on urban health from 2001. They explain:

> The work of Wilkinson (1996) has been widely used in discussions of health inequalities. He proposes that relative inequalities in income lead to a breakdown in a society's social cohesion, creating chronic psychosocial stress with both direct and indirect negative influences on both physical and mental health. The deterioration of community life and subsequent rise in violence and crime have a detrimental impact on all members of society, not just the poor. It is the proximity of the urban poor to what are frequently some of the richest people in the world that has been linked to much of the tension and social unrest characteristic of urban areas.

Despite the argument that tackling inequalities will help meet the needs of the poorest and the not so poor alike, some urban health scholars have argued that it will take time to address the underlying political, economic and social factors that produce low-income urban settlements and poor health (Unger and Riley 2007) and that addressing these factors is complex and requires political will. These scholars have suggested the need for quick interventions that can save lives, such as improving drainage and sewerage systems and lighting alleys in slum settlements, among others. Others who have focused on specific health issues have called for the need for governments to waive user fees for health services accessed by the urban poor, and enhance access to quality health care through partnerships with the private sector that extend quality health care services to slum residents (cf. Fotso *et al.* 2008).

The Global Research Network on Urban Health Equity (GRNUHE 2010) has suggested an interventional model that addresses the urban physical form, its social infrastructure, the added pressure of climate change, and the role of governance. These would focus on:

- city-wide urban planning for health equity, which involves reconnecting urban planning and public health;
- improving social conditions to improve urban health equity that includes improved working conditions; making cities safer through urban planning, for example, by designing improved transport systems and spaces for physical activity and improving the built environment to adapt to and mitigate against climate change;
- urban governance for health equity, which should foster community participation, partnerships and empowerment, as well as intersectoral action so that the health sector plays a role in municipal, regional and national governance.

To this end WHO has produced Urban HEART, which is a tool that allows governments to track urbanisation and associated health equity (KNUS 2008). Urban HEART enables the disaggregation of data by geographical area or social group and encourages responsive policy and interventions (WHO 2010b). They have also created training programmes that seek to link public health and community action at the municipal level (KNUS 2008). The UN-HABITAT programme has developed a software tool, UrbanInfo, which helps store, analyse and display data across a range of urban indicators (WHO 2010b).

Healthy City initiatives have also received some attention and have the following characteristics: community involvement in municipal health policy planning; awareness raising with municipal and national policymakers regarding the importance of a focus on health in urban development; partnerships between municipal government and communities to improve living conditions in poor urban settlements; and information exchange and mutual learning between different cities involved in the scheme (Harpham 2009). Theoretically it is an approach that brings together many of the recommendations signalled by research on urban health. However, Harpham evaluated the implementation of these schemes in a variety of settings. She found that while the initiative increased awareness and financial support, political commitment to change was limited which meant that the schemes had less influence on municipal health plans and other policy development. This lack of support may be a consequence of the fact that the initiative was externally generated and donor-driven but the weakness of municipal health departments *vis-à-vis* other powerful political actors may also play a part. GRNHUE (2010) suggest that the evaluation of Health City initiatives have on the whole failed to assess their impact on health risks, outcomes and inequities.

Local decision-making, for example about markets and jobs, is increasingly affected by globalisation (Harpham and Molyneux 2001). For example, changes in agricultural world markets such as restrictive import policies and subsidies and processes like mechanisation have led some rural dwellers to seek employment and economic opportunities in urban areas (GRNUHE 2010). A focus on the national or sub-national level alone seems unlikely to yield results without some acknowledgement of the way that globalisation affects the inhabitants of low-income settlements in urban areas in developing countries.

6.3 Community participation and involvement

KNUS (2008) suggests that ceding power and resources to local communities so that they can improve their own environment is an important strategy. This may include their involvement in upgrading processes and local governance arrangements, monitoring progress on commitments and improving the mechanisms that enable people in low-income settlements to engage with powerful stakeholders, for example donors. While 'best practice'

bottom-up programmes and 'top-down' programmes that include and involve NGOs and community-based groups exist, too few have been taken to a scale.

The relationship between government authorities and civil society is not always straightforward or harmonious, and this may affect the implementation of the kind of cross-sectoral partnership that is necessary (Harpham 2009). GRNUHE (2010: 49) explored research on participation in decision-making in South Africa and point out that in some formal interventions participation is more about the 'accommodation of existing interests', which is unlikely to lead to the changes that are needed to improve the situation in low-income urban settlements. They argue that this leads citizens to exert their power within the informal public order in order to influence decision-making. This type of activism is not much explored in the literature, which tends to focus on formal government-, donor- or NGO-led interventions.

Community participation in the absence of a focus on inequality and the structural drivers of poverty and ill health may run the risk of placing the onus of responsibility on poor households and communities while underplaying the importance of governance in either perpetuating or transforming cities (Harpham and Molyneux 2001). Chant (2013) suggests that histories of women's collective struggles for rights and entitlements may provide a starting point for interventions to improve low-income settlements. However, care should be taken that these interventions do not 'feminize responsibility' in ways that place even more burdens on women, or that instrumentalise their activism (Chant 2013).

How should we define and delineate communities? Most interventions that seek to improve the environment in poor urban settlements draw geographical boundaries around communities for the purposes of improving or upgrading people's living conditions. Harpham and Molyneux explore the literature related to nutrition studies from Abidjan and Accra, which appear to show that even within settings where the infrastructure and income of households are similar there can be differences in nutritional status, which they suggest are due to the particulars of each home environment and its emphasis or otherwise on nutritional outcomes. They argue that this variation within poor urban settlements points to the need to work at various levels, 'individual, household, neighbourhood, community and city' (Harpham and Molyneux 2001: 131).

6.4   Gendering urban health research

Our review has found in the literature some examples of interventions that seek to address the structural drivers of ill health while tackling participation and inequality. Yet few researchers point to policy or programmatic changes that are explicitly gendered. Frye *et al*. (2008) suggest that, given the paucity of evidence on gender and urban health research, a new approach is needed. They argue that researchers should: explicitly address gender as a structural cause of ill health; consider the gendered impact of urban spaces; collect data that enable gender-sensitive analysis and take account of intersectionality and the way that various forms of inequality can alter women's experience of living in low-income urban settlements; incorporate new methods that allow us to understand health problems rather than just quantifying them; and blend disciplines to avoid an apolitical and positivist analysis.

7 Conclusion

What then can be concluded about ways to address gendered aspects of health problems for poor women and girls in low-income urban settlements in Kenya and South Africa? A key issue relates to advocating interventions that can address some of the health problems in a holistic rather than an isolated way, and that attempt to consider the underlying structural factors that go beyond narrowly defined notions of health. A consideration of interventions prompts the question of levels of responsibility for addressing the health problems of poor women and girls in low-income urban settlements, from the level of international stakeholders, such as donors, to national governments and local municipalities. Infrastructural reform and accessibility of basic services are key, as also are cross-sectoral approaches that can appropriately support change on the ground. We would argue that women should not walk the road alone, and that interventions should focus on community involvement, including engaging men, and see the urban poor as change agents and not just passive recipients of interventions and policy pronouncements. It appears that campaigning and advocacy at national and sub-national levels is necessary to point out gaps in implementation and to inform international action to avoid uncritical blueprint solutions. Moreover, women living in 'slum' areas are not a homogenous group and while they require the provision of integrated services, careful targeting might be needed to avoid marginalisation.

Finally we would suggest that it is important to generate robust evidence and evaluate existing interventions rather than encourage a constant proliferation of standalone projects. However, 'evidence' should include the voices of women themselves and their experience of life in these settlements. Communication techniques can be powerful in making a range of evidence available, palatable and relevant. We would argue for a need to communicate issues in new ways and to seek accounts that also highlight the potentially positive features of urban living for women and girls. This might lead us to ask new questions, to see the challenges from different perspectives and to bring new life to a topic for jaded decision-makers.

Annex 1   Methodology – description of search terms and their application

Table A1 displays the search terms and combinations that we applied to the databases listed below. However, as some databases and websites either had less sophisticated search capability, or had smaller collections of material, we had to adapt the way that we searched these websites. Table A2 shows the number of articles returned within each database for each search term. Those databases marked with an asterisk were ones where a modified search had to be employed. Further details are given below.

Table A1: Search terms and combinations

Key	Search term
A	Title=(urban* OR slum OR peri-urban) AND Title=(health OR disease* OR illness OR HIV)
B	Title=(urban* OR slum OR peri-urban) AND Title=(health OR disease* OR illness OR HIV) AND Title=(Africa*)
C	Title=(urban* OR slum* OR peri-urban) AND Title=(health OR disease* OR illness OR HIV) AND Title=(women OR girl* OR gender)
D	Title=(urban* OR slum* OR peri-urban) AND Title=(health OR disease* OR illness OR HIV) AND Title=(Kenya OR "South Africa")
E	Title=(urban* OR slum* OR peri-urban) AND Title=(health OR disease* OR illness OR HIV) AND Title=(women OR girl* OR gender) AND Title=(Kenya OR "South Africa")

Table A2: Number of articles returned by each search term

Name of database	No. of results for search A	No. of results for search B	No. of results for search C	No. of results for search D	No. of results for search E
Web of Science	2,563	178	210	72	11
Science Direct	511	37	32	10	1
Global Health	1,475	106	128	81	10
Anthrosource*	4	7	7	2	1
PubMed	1,653	1	139	52	9
Anthropology Index Online	129	14	128	5	2
Eldis*	37	2	4	3	1
AfroLib*	21	7	0	1	0
Cochrane	61	17	10	1	0
CREHS/RESYST*	0	0	0	0	0
Evidence for Action*	0	0	0	0	0
STRIVE*	0	0	0	0	0
STEP UP*	0	0	0	0	0
PRIME*	0	0	0	0	0
UNICEF	0	0	0	0	0
UN Women	0	0	0	0	0
Total	6,454	369	658	227	35

Anthrosource

In the advanced search option, the search is limited to the following categories in three different rows:

- searching all of the words
- searching the exact phrase
- searching at least one of the words

We initially used the last option inserting the keywords of A. This resulted in hits that were mostly not related to our search theme as it looked for journal titles with ANY of the terms in different e-sources on agriculture, politics, etc. and did not combine urban AND health as we wanted. Therefore the first and third rows were combined to locate relevant article titles. Hence (urban OR slum OR peri-urban) were used in the last row and health, disease, illness and HIV were inserted in the first row separately, for example Health AND (urban OR slum OR peri-urban), disease AND (urban OR slum OR peri-urban), and so on. The same combining search method was used for the rest of the categories in B–E; (urban OR slum OR peri-urban), always in the third row and mixing other keywords in the first, and searching each separately. All different combinations were tried. Since searching only the journal titles brought few hits, we also included an Abstract search in categories B–E.

Eldis

The search functionality on the Eldis website was not sufficiently sophisticated for us to conduct the searches in the way that we needed to for this review. However, as Eldis is managed by the Knowledge Services team here at IDS, and one of the members of staff working on the review also works on the Eldis website, we had a good understanding of, and access to, the 'back-end' of the Eldis database, and were able to conduct a more sophisticated search this way.

AfroLib

If we searched only the title, the database brought up no results in all cases. So, for AfroLib, we searched using keywords. However, when it came to searches D and E (where countries are specified), we used geographic descriptors, because if they weren't used, zero results were displayed. In total, in search A, there were 24 results when including material dating back to the 1990s. Only materials from 2002 to the present were recorded. A search excluding the urban aspects, but including the gender and health limiters resulted in 76 hits. However, we did not include these documents in our review as they missed the urban/slum aspect, which was a key component of the search.

DFID RPCs (CREHS/RESYST, Evidence for Action, STRIVE, STEP UP, PRIME)

As these websites do not contain large repositories of documents, we scanned the websites for materials relevant to this review.

Annex 2   Online discussion

In January 2013 an online discussion on gender and health in urban areas was facilitated via the Eldis Communities platform (http://community.eldis.org/). The purpose of the discussion was to explore the following questions (these set the frame for each day's interactions):

1.   What are the key issues and trends in terms of urbanisation and women's and girls' health?
2.   What interventions aim to address women's and girls' health in urban areas? What examples of promising practice do you see?
3.   What needs to be done differently to improve health outcomes for urban women and girls? What are the policy and programmatic priorities for the future?

The aim of the discussion was to inform the selection of literature for the thematic review and to help identify additional examples of interventions and policy and programmes that participants considered promising practice.

The online discussion was managed by Adrian Bannister (IDS Knowledge Services) and administered by Leah Murphy (IDS Knowledge Services). It was chaired by Kate Hawkins (Director, Pamoja Communications) and Hayley MacGregor (IDS Research Fellow), the authors of this review. The discussions were timed to be convenient to participants from South Africa and Kenya. Each morning the discussion was opened with a set of framing questions from the chairs. Participants were able to send inputs via email or by logging into the Eldis Communities platform and posting their discussion point on a message board. Participants were encouraged to post spontaneously in response to threads of interest, and some interventions were collected from participants in advance in order to ensure that information flowed steadily throughout the three days. Each day was closed with a summary from the chairs.

Forty-eight participants took part in the discussion. They were identified via the thematic review authors' professional networks, via the literature that had been identified for the review, and invitees were prompted to suggest additional attendees who they felt could meaningfully contribute to the debate. Participants were from research/academic, non-governmental organisations, UNDP, and donor bodies, with a particular focus on people working within, or with knowledge of, Kenya and South Africa. A list of participants and their biographies is included in Annex 3.

This vibrant and engaging debate elicited 75 responses in total: 31 responses on day 1, 22 responses on day 2, and 22 responses on day 3. The unedited transcript of the discussion is over 28,500 words long.

What are the key issues and trends in terms of urbanisation and women's and girls' health?

This section of the discussion highlighted a diverse range of health challenges for women and girls living in poor urban settlements. Participants felt that we need to consider inequality as conceptually central to this work. This might be inequality in terms of burden of disease or access to quality health care. The importance of considering inequality between rural and urban settings and within urban settings was underscored. Participants underscored the need to avoid generalisations or assumptions that urbanisation necessarily improves health and that movement (of people and resources) is only one-way. It was felt that disaggregation of data is important, particularly by gender, in order to take into account different urban spaces and the various priorities and challenges of women throughout their lifecycle.

We heard how heteronormative assumptions and power structures, and gender conformity lead to particular risks and vulnerabilities for some urban people, impacting negatively and differentially on different women, girls, men and boys who are struggling to conform to expectations in different ways. Ill health clearly occurs at the intersections of different axes of inequality. As a result we need holistic definitions of health and intersectoral approaches. Comments were made on housing, sanitation, violence, food security and quality, and environmental threats. The benefits of integrated care and joined-up thinking within the health system, for example in terms of its linkage with transport, were pointed to.

Participants felt it was important to challenge gender norms, for example in terms of who is responsible for caregiving or ensuring cleanliness, and that development agencies have a long history of stereotyping women which can fail to challenge the status quo and add to their burdens. Some elements of risk taking or priority setting, such as privileging curative services over preventative, might make sense to women focusing on daily survival in precarious economic circumstances.

What interventions aim to address women's and girls' health in urban areas? What examples of promising practice do you see?

Participants stressed the importance of participatory approaches informing research and interventions. Community accountability mechanisms such as the 'health committee' programme were considered interesting. There was mention of the 'tyranny of the RCT' (randomised controlled trial) in relation to donors' drive towards 'evidence-informed' policy. However participants also drew attention to the value of solid quantitative evidence in dispelling some of the myths and received assumptions about women's health in urban areas. That being said, it was considered important to consider the views and experiences of a wide range of stakeholders when evaluating interventions.

What needs to be done differently to improve health outcomes for urban women and girls? What are the policy and programmatic priorities for the future?

In this section of the discussion participants emphasised the importance of infrastructure and accessibility of basic services as key, as well as cross-sectoral approaches to health programming. Many noted the importance of community involvement and seeing urban poor people as change agents and not just passive recipients of interventions and policy pronouncements. Campaigning and advocacy at national and sub-national levels is necessary to point out gaps in implementation and to inform international action to avoid uncritical blueprint solutions. Participants stressed the importance of generating robust evidence and evaluating existing interventions rather than encouraging a constant proliferation of standalone projects.

We heard that communication techniques can be powerful in making evidence available, palatable, and relevant. Sometimes communicating issues in new ways such as considering the positive aspects of life, like pleasure, can lead us to ask new questions, to see the challenges from different perspectives and bring new life to a topic for jaded decision-makers.

The discussion made it clear that we need to be careful when talking about poverty and inequality and recognise the dynamic nature of patterns of urbanisation. Women are not a homogenous group and some are more marginalised than others – for instance, migrant women, young women, older women, disabled women, trans women, lesbians, people who use drugs and sex workers. While women require integrated services we also need careful targeting to avoid marginalisation.

Finally, in contexts where there are no policies on certain issues or where they are inadequate, we noted that framing claims in terms of costs and lives lost, or in terms of international agreements, may be a strategic approach to stimulating political change and leveraging support. This may also be the case where rights-based approaches are suppressed by moralistic narratives, such as where prevailing health discourses promote abstinence for poor young women and girls as the most effective or 'best' solutions for HIV/STI prevention, despite lack of credible evidence and at high costs in terms of women's ill health and mortality.

Annex 3   Online discussion participants and biographies

Participant	Biography
Akshay Khanna, Institute of Development Studies	Akshay Khanna works on the intersections of anthropology, activism and development praxis. A founder member of Prism, a Delhi-based queer activist collective, Akshay has worked as a human rights lawyer, focusing on issues arising out of the HIV/AIDS epidemic, and contributed to drafting the law against domestic violence in India. Currently Akshay is a research fellow in the Institute of Development Studies' Participation, Power and Social Change team.
Alice Welbourn, Director, Salamander Trust	Alice works in gender, HIV, and social justice worldwide. She focuses especially on ways of reducing gender-based violence, which is both a cause and a consequence of HIV for many women. She developed a training programme on gender, HIV, communication and relationship skills, called 'Stepping Stones' after she was diagnosed with HIV 21 years ago. Alice enjoys reading, writing, connecting people with common interests, sharing information and making good things happen. She also enjoys learning something new every year – this last year it was making candles from love and recycled wax. When it is warm enough, Alice also enjoys swimming a kilometre a day.
Andrea Cornwall, Professor of Anthropology & Development, University of Sussex	Andrea Cornwall is a political anthropologist who specialises in the anthropology of democracy, citizen participation, participatory research, gender and sexuality. She has worked on a wide range of topics, including: understanding women's perspectives on family planning, fertility and sexually transmitted infection in Nigeria and Zimbabwe; public engagement in UK regeneration programmes, the quality of democratic deliberation in new democratic spaces in Brazil; the use and abuse of participatory appraisal in Kenya; domestic workers' rights activism in Brazil; and sex workers' rights activism in India.
Caroline Kabiru, Head of Urbanization and Wellbeing Program, African Population and Health Research Center (APHRC)	Caroline Kabiru has a PhD in Health Promotion and Behavior from the University of Georgia, Athens (USA). Her research interests centre on issues related to adolescent health, including resilience and positive youth development. She is involved in research activities focusing on adolescent sexual and reproductive health, and urban health issues.
Chi-Chi Undie, Associate, Population Council	Chi-Chi Undie is an Associate in the Reproductive Health Services & Research Program of the Population Council in Nairobi, Kenya. She currently coordinates the 'Africa Regional Sexual and Gender-Based Violence Network' – a network of partners in east and southern Africa – all working to operationalise a comprehensive model of response to SGBV survivors in the region.

(Cont'd.)

Annex 3 (cont'd.)

Participant	Biography
Chimaraoke Izugbara, Research Scientist and Head of Research Capacity Strengthening Theme, African Population and Health Research Center (APHRC)	Chimaraoke joined APHRC in 2006 as a Sabbatical Fellow and was appointed to the position of Associate Research Scientist in August 2007. Prior to this, he worked with the Universities of Jos and Uyo in Nigeria as a lecturer and researcher, and with the Five College African Scholars Program, University of Massachusetts, Amherst (USA) as a resident scholar and professor. Chimaraoke`s current research interests are: sociocultural determinants of reproductive health outcomes, care-seeking practices, sexuality, and sexual behaviour.
Clare Herrick, Senior Lecturer, King's College	Claire is a health geographer interested in the ways in which urban spaces and health behaviours and policies intersect and interact.
Deborah Cousins, Community Water Supply and Sanitation Unit, Cape Peninsula, University of Technology	
Eliya Zulu, Executive Director, African Institute for Development Policy (AFIDEP)	Eliya Msiyaphazi Zulu is the Executive Director of the African Institute for Development Policy (AFIDEP) whose mission is to inform public policy and planning with research evidence. Before co-founding AFIDEP, he was the Deputy Director and Director of Research at the African Population and Health Research Center (APHRC) where he headed the Policy Engagement and Communications Unit and the Urbanization and Wellbeing Research Program.
Faustina Frempong-Ainguah, Postgraduate Research Student, University of Southampton	Faustina is a social scientist, with a Master of Philosophy degree in Population Studies, University of Ghana. Through exposure to varying research areas, she has developed a passion for studying health and welfare issues, especially among women and children. She is currently a postgraduate research student with the Division of Social Statistics at the University of Southampton.
Godfrey Mbaruku, Deputy Chief Executive Director, Ifakara Health Institute	Dr Godfrey Michael Mbaruku is the Deputy Chief Executive Director of IHI and holds a doctor of medicine degree from the University of Dar es Salaam and a Master of Medicine in obstetrics/gynaecology. His work on appropriate interventions in improving reproductive health in rural settings has been adopted at national and international level.
Grace Maingi-Kimani, Executive Director, Uraia Trust	
Harriet Cochrane, Comic Relief	Harriet is the health programme manager for International Grants at Comic Relief. This involves managing grants across Africa, with a focus on maternal and child health, and a growing interest in urban health. Previously Harriet spent ten years working with NGOs, mainly in Africa, managing both health and non-health-related projects.

(Cont'd.)

Annex 3 (cont'd.)

Participant	Biography
Ian Askew, Director, Reproductive Health Services and Research, Population Council	Ian is Director of the Population Council's Reproductive Health Services and Research programme and also co-director of the DFID-funded Research Programme Consortium called 'Strengthening Evidence for Programming on Unintended Pregnancy' (STEP UP). For more than 20 years Ian has been based in Nairobi from where he manages the Council's global programme of operations research that provides rigorous evidence for strengthening reproductive and maternal health services and informing policy development.
Ireen Namakhoma, Director, REACH Trust	
Jim Campbell, Director, Instituto de Cooperación Social Integrare (ICS Integrare)	Jim is the Director of ICS Integrare, based in Barcelona, Spain. He was a co-author of the State of the World's Midwifery report in 2011, works extensively in the field of Human Resources for Maternal and Newborn Health (MNH) with research interests in urban/rural and socioeconomic inequities in access to MNH services. He is currently preparing his doctoral thesis on evidence-based decision-making in human resources for health in LMICs.
Joyce Mumah, Postdoctoral Research Fellow, African Population and Health Research Center (APHRC)	Joyce's research interests include gender, reproductive health, HIV/AIDS, adolescents, marriage, socioeconomic determinants of health, and African development. Joyce is driven by the potential impact of her research.
Karen Austrian, Associate, Population Council	Karen Austrian manages several asset building programmes, and their accompanying research studies, for vulnerable adolescent girls in Kenya, Uganda and Zambia. Karen is currently based in Nairobi, Kenya and has lived there for seven of the last ten years.
Kate Harrison, Portfolio Manager for Health, International Grants Team, Comic Relief	Kate works in the International Grants team at Comic Relief as the Portfolio Manager for Health. She manages three staff working on health, HIV and Sport for Change, and also manages a clutch of grants focused on maternal and child health and malaria. The team has recently made some grants based in urban settings – Dar es Salaam, Lusaka, Nairobi, Accra and Monrovia – and Kate is very interested in the different challenges and opportunities provided by an urban setting.
Kate Hawkins, Director, Pamoja Communications	Kate Hawkins is the Director of Pamoja Communications and previously worked at IDS as the Convenor of the Sexuality and Development Programme and in communication roles on various health programmes. She has an interest in HIV and sexual and reproductive health and rights and the ways in which evidence informs policy and practice. This interest is influenced by her time working in policy and advocacy roles for various international non-governmental organisations.

(Cont'd.)

Annex 3 (cont'd.)

Participant	Biography
Kelly Muraya, PhD Student, Kemri-Wellcome Trust Research Programme	Kelly is a Kenyan PhD Student in the final year of her PhD work. She has had an interest in gender issues for as long as she can remember; and as part of her Honours Degree undertook a ten-month research project on the experiences of domestic violence among African refugee women who had been resettled in Australia. Kelly has worked in a range of fields including: counselling; community liaison work; advocacy; and social work, primarily with indigenous Australian communities and African refugees in Australia. Kelly resettled back to Kenya three years ago and has since been undertaking research work in Kilifi, a rural town on the coast of Kenya. Kelly's current research work is around gender relations and their interaction with child nutrition interventions within households in rural Kenya, with a focus on implementation and use of such interventions.
Leah Murphy, Health and Education Convenor, Institute of Development Studies	Leah is the Health and Education Convenor for the Knowledge Services Department at the Institute of Development Studies, UK.
Lyla Mehta, Fellow, Knowledge Technology and Society Team, Institute of Development Studies	Lyla Mehta is a Research Fellow at IDS in the KNOTS team and an Adjunct Professor at Noragric, Norwegian University of Life Sciences. She trained as a sociologist (University of Vienna) and has a PhD in Development Studies (University of Sussex). Her work focuses on water and sanitation, forced migration and resistance, scarcity, rights and access and the politics of environment/development and sustainability. She is currently the water and sanitation domain convenor of the STEPS centre.
Marion Stevens, WISH Coordinator, Women in Sexual and Reproductive Rights and Health (WISH) Associates	Marion Stevens has a background as a midwife, in medical anthropology and in public health and development. She has worked in the area of sexual and reproductive health and HIV/AIDS for some 20 years. She is currently the coordinator of WISH Associates (Women in Sexual and Reproductive Rights and Health), a network of nine South African consultant activists.
Mesfin Getahun Haileyesus, Policy Specialist, Governance of HIV Responses, UNDP	Mesfin has been engaged in urbanisation-related work since the 1990s while working as a researcher for the Ethiopian National Urban Planning Institute. He has maintained his interest in urbanisation ever since, particularly focusing on social and economic challenges facing the urban poor, marginalised groups, women and young people. He is presently involved in a regional initiative that aims to develop the capacity of municipal authorities of major cities and their partners in east and southern Africa for enhanced response to HIV and AIDS.
Milly Pekeur, Manager, Parent-Infant Intervention Home Visiting Programme, The Parent Centre	Milly is a mother of two kids, aged ten and six. She loves working on issues pertaining to human rights and social development. She is very creative with flowers and interior decorating.

(Cont'd.)

Annex 3 (cont'd.)

Participant	Biography
Mitzy Gafos, Social Scientist, Clinical Trials Unit, Medical Research Council	Mitzy is a social scientist who has worked within the context of HIV prevention trials for the last nine years. She lived for six years in a rural part of KwaZulu-Natal, South Africa, conducting a clinical trial of vaginal microbicides and is at the latter stages of her PhD, which is using quantitative and qualitative data to evaluate microbicides, sexuality and sexual health in KwaZulu-Natal.
Neda Monshat, Lawyer, Federation of Women Lawyers in Kenya (FIDA-Kenya)	Neda is currently a lawyer in the Strategic Team at the Federation of Women Lawyers Nairobi office in Kenya. She has worked as a lawyer in Australia, South Africa and the UK. Her background is in human rights law, criminal law and women's rights.
Roma Chilengi, The Centre for Infectious Diseases	
Rose Nyawira, Coordinator, Urban Community Led Total Sanitation	
Rose Oronje, African Institute for Development Policy/PhD candidate, Institute of Development Studies	Rose is interested in the policies and laws that respond to sexual and reproductive health (SRH) issues in sub-Saharan Africa. Specifically, she is interested in exploring ways of influencing these policies and laws for improved SRH outcomes among marginalised groups – women, girls, adolescents and sexual minorities.
Sally Theobald, Senior Lecturer in Social Science and International Health, Liverpool School of Tropical Medicine	Sally is a Senior Lecturer in Social Science and International Health in the International Health Research Group, Liverpool School of Tropical Medicine (LSTM) in the UK. She has a Masters in Gender and Development and completed her PhD on gender and occupational health in Thailand. She has research interests in gender equity, gender-based violence and HIV (with work in Kenya and Malawi) and gender equity and tuberculosis (with ongoing research in Ethiopia and Yemen).
Sarah Forde, Independent Consultant	Sarah is an independent consultant based in Kenya, working in women's and girls' rights and organisational development and as a writer. Twelve years ago she founded a girls' football, reproductive health and rights NGO in coastal Kenya – 'Moving the Goalposts'. Sarah is currently providing technical support to a small community-based organisation in Korogocho slum, called Boxgirls and an NGO working with Maasai girls in Kajiado. She loves football.
Shelley Lees, Lecturer, London School of Hygiene and Tropical Medicine	Shelley is a social scientist/anthropologist with experience in leading research on HIV prevention and care, maternal health, and gender-based violence in relation to sociocultural and structural factors. Her anthropological interests focus on sexuality in the context of the HIV epidemic and participation in medical research.
Sue Cavill, Research Manager, SHARE, Water Supply and Sanitation Consultant/WaterAid	Sue is a water supply and sanitation specialist with a particular interest in gender and vulnerable and marginalised groups.
Tanya Charles, Research Consultant, Sonke Gender Justice	

(Cont'd.)

Annex 3 (cont'd.)

Participant	Biography
Teresa Omondi, Deputy Executive Director & Head of Programmes, Federation of Women Lawyers in Kenya (FIDA-Kenya)	Teresa is an advocate with ten years' work experience on gender and the governance sector. Seven of those years were spent with women's rights organisations/institutions championing the rights of women as human rights. Teresa loves adventure – going to new places and trying out what most say is impossible.
Thandi Puoane, Professor, School of Public Health, University of the Western Cape	Thandi is a professor at the School of Public Health, University of the Western Cape. She has a nursing background, teaching and research experience in the areas of nutrition and chronic non-communicable diseases. She is interested in learning more about sociocultural and environmental factors that shape the behaviours of the South African population.
Wanjiru Mukoma, Director of Research and Policy, Liverpool VCT, Care and Treatment (LVCT)	Wanjiru works in Nairobi as Director of Research and Policy at LVCT. Her research interests include health systems strengthening, HIV behaviour, adolescent and youth sexual and reproductive health.

References

APHRC (African Population and Health Research Centre) (2002) *Population and Health Dynamics in Nairobi's Informal Settlements,* Nairobi: African Population and Health Research Centre

Allender, S.; Lacey, B.; Webster, P.; Rayner, M.; Deepa, M.; Scarborough, P.; Arambepola, C.; Datta, M. and Mohan, V. (2010) 'Level of Urbanization and Non-communicable Disease Risk Factors in Tamil Nadu, India', *Bulletin of the World Health Organization* 88: 297–304

Amnesty International (2010) *Insecurity and Indignity: Women's Experiences in the Slums of Nairobi, Kenya*, London: Amnesty International

Amuyunzu-Nyamongo, M. and Nyamongo, I. (2006) 'Health Seeking Behaviour of Mothers of Under-Five-Year-Old Children in the Slum Communities of Nairobi, Kenya', *Anthropology & Medicine* 13.1: 25–40

Austrian, K. (2011) 'Expanding Safe Spaces, Financial Education, and Savings for Adolescent Girls in Kenya', *Promoting Healthy, Safe, and Productive Transitions to Adulthood*, Brief no. 29, Population Council

Baird, S.J.; Garfein, R.S.; McIntosh, C.T. and Ozler, B. (2012) 'Effect of a Cash Transfer Programme for Schooling on Prevalence of HIV and Herpes Simplex Type 2 in Malawi: A Cluster Randomised Trial', *The Lancet* 379.9823: 1320–29

Booysen, F.R. (2003) 'Urban–rural Inequalities in Health Care Delivery in South Africa', *Development Southern Africa* 20.5: 659–73

Bradley, H.A. and Puoane, T. (2007) 'Prevention of Hypertension and Diabetes in an Urban Setting in South Africa: Participatory Action Research with Community Health Workers', *Ethnicity & Disease* 16.1: 49–54

Carrasco, L.N., Vearey, J. and Drimie, S. (2003) 'Who cares? HIV-related Sickness, Urban–Rural Linkages, and the Gendered Role of Care in Return Migration in South Africa', *Gender and Development* 19.1: 105–14

Chant, S. (2013) 'Cities Through a "Gender Lens": A Golden "Urban Age" for Women in the Global South?', *Environment and Urbanization* 25: 9

Department of Social Development, South African Social Security Agency and UNICEF (2012) *Executive Summary: The South African Child Support Grant Impact Assessment*, Johannesburg: UNICEF South Africa

Dudley L.; Azevedo, V.; Grant, R.; Schoeman, J.H.; Dikweni, L. and Maher D. (2003) 'Evaluation of Community Contribution to Tuberculosis Control in Cape Town, South Africa', *International Journal of Tuberculosis and Lung Disease* 7: S48–S55

Dye, C. (2008) 'Health and Urban Living', *Science* 319.5864: 766–69

Emina, J., Beguy, D.; Zulu, E.M.; Ezeh, A.C.; Muindi, K.; Elung'ata, P.; Otsola, J.K. and Yé, Y. (2011) 'Monitoring of Health and Demographic Outcomes in Poor Urban Settlements: Evidence from the Nairobi Urban Health and Demographic Surveillance System', *Journal of Urban Health* 8.Supplement 2: 200–18

Erulkar A.; Bruce, J.; Dondo, A.; Sebstad, J.; Matheka, J.; Khan, A.B. and Gathuku, A. (2006) *Tap and Reposition Youth (TRY) Providing Social Support, Savings, and Microcredit Opportunities for Young Women in Areas with High HIV Prevalence*, Nairobi: Population Council

Erulkar, A.S. and Matheka, J.K. (2007) *Adolescence in the Kibera Slums of Nairobi, Kenya*, Nairobi: Population Council

Erulkar, A.; Mekbib, T.; Simie, N. and Gulema, J. (2006) 'Differential Use of Adolescent Reproductive Health Programs in Addis Ababa, Ethiopia', *Journal of Adolescent Health* 38: 253–60

Falkingham, J.C.; Chepngeno-Langat, G.; Kyobutungi, C.; Ezeh, A. and Evandrou, M. (2011) 'Does Socioeconomic Inequality in Health Persist among Older People Living in Resource-Poor Urban Slums?', *Journal of Urban Health*, *Bulletin of the New York Academy of Medicine*, 88.Suppl 2

Few, R.; Harpham, T. and Atkinson S. (2003) 'Urban Primary Health Care in Africa: A Comparative Analysis of City-Wide Public Sector Projects in Lusaka and Dar es Salaam', *Health & Place* 9.1: 45–53

Fotso, J.C.; Ezeh, A.; Madise, N.; Ziraba, A. and Ogollah, R. (2009) 'What does Access to Maternal Care Mean among the Urban Poor? Factors Associated with Use of Appropriate Maternal Health Services in the Slum Settlements of Nairobi, Kenya', *Maternal and Child Health Journal* 13: 130–37

Fotso, J.C., Ezeh, A.C. and Oronje, R. (2008) 'Provision and Use of Maternal Health Services among Urban Poor Women in Kenya: What Do We Know and What Can We Do?', *Journal of Urban Health, Bulletin of the New York Academy of Medicine* 85.3

Freudenberg, N.; Galea, S. and Vlahov, D. (2005) 'Beyond Urban Penalty and Urban Sprawl: Back to Living Conditions as the Focus of Urban Health', *Journal of Community Health* 30.1

Friel, S.; Chopra, M.; Satcher, D. (2007) 'Unequal Weight: Equity Oriented Policy Responses to the Global Obesity Epidemic', *BMJ* 335.7632: 1241–43

Frye, V.; Putnam, S. and O'Campo, P. (2008) 'Whither Gender in Urban Health?', *Health & Place* 14: 616–22

Galea, S. and Vlahov, D. (2005) 'Urban Health: Evidence, Challenges, and Directions', *Annual Review of Public Health*, 26: 341–65

Garenne, M. (2010) 'Urbanisation and Child Health in Resource Poor Settings with Special Reference to Under-Five Mortality in Africa', *Arch Dis Child* 956: 464–8

Garone, D.B.; Hilderbrand, K.; Boulle, A.M.; Coetzee, D.; Goemaere, E.; Van Cutsem, G. and Besada, D. (2011) 'Khayelitsha 2001–2011: 10 Years of Primary Care HIV and TB Programmes', *Southern African Journal of HIV Medicine* 12.4

GRNUHE (Global Research Network on Urban Health Equity) (UCL) (2010) *Improving Urban Health Equity Through Action on the Social and Environmental Determinants of Health*, London: GRNUHE

Gulis, G.; Mulumba, J.A.; Juma, O. and Kakosova, B. (2004) 'Health Status of People of Slums in Nairobi, Kenya', *Environmental Research* 96.2: 219–27

Gulyani, S.; Talukdar, D. and Potter, C. (2006) *Inside Informality: Poverty, Jobs, Housing, and Services in Nairobi's Informal Settlements*, Washington DC: World Bank

Guterres, A. and Spiegel, P. (2012) 'The State of the World's Refugees: Adapting Health Responses to Urban Environments', *Journal of the American Medical Association* 308.7: 673–74

Handa, S.; Pettifor, A; Thirumurthy, H. and Halpern, C. (2012) 'Effect of a National Social Cash Transfer Program on HIV Risk Behaviour in Kenya', abstract presented at the XIX International AIDS Conference, Washington DC, July 22–27

Harpham, T. (2009) 'Urban Health in Developing Countries: What Do We Know and Where Do We Go?', *Health & Place* 15: 107–16

Harpham, T. and Molyneux, C. (2001) 'Urban Health in Developing Countries: A Review', *Progress in Development Studies* 1: 113–37

Havenaar, J.M.; Geerlings, M.I.; Vivian, L.; Collinson, M. and Robertson, B. (2007) 'Common Mental Health Problems in Historically Disadvantaged Urban and Rural Communities in South Africa: Prevalence and Risk Factors', *Social Psychiatry and Psychiatric Epidemiology* http://www.ncbi.nlm.nih.gov/pubmed/18058040

Henderson, J. and Cloete, A. (2011) 'Disrupting Heteronormativity: Reflections on Research into the Sexual Health and Rights of Lesbian and Bisexual Women living in Peri-Urban and Rural Areas in South Africa', *Culture Health & Sexuality* 13: S60–S61

Hernandez, A.V.; Pasupuleti, V.; Deshpande, A.; Bernabe-Ortiz, A. and Miranda, J.J. (2012) 'Effect of Rural-to-Urban Within-Country Migration on Cardiovascular Risk Factors in Low- and Middle-income Countries: A Systematic Review. Global Burden of Cardiovascular Disease', *Heart* 98: 185–94

Herrick, A.L.; Matthews, A.K. and Garofalo, R. (2010) 'Health Risk Behaviors in an Urban Sample of Young Women who Have Sex with Women', *J Lesbian Stud* 14.1: 80–92

Izugbara, C.O. and Ngilangwa, D. (2010) 'Women, Poverty and Adverse Maternal Outcomes in Nairobi, Kenya', *BMC Women's Health* 10: 33

Izugbara, C.O. and Wekesa, E. (2011) 'Beliefs and Practices about Antiretroviral Medication: A Study of Poor Urban Kenyans Living with HIV/AIDS', *Sociology of Health & Illness* 33.6: 869–83

Joshi, D.; Fawcett, B. and Mannan, F.A. (2011) 'Health, Hygiene and Appropriate Sanitation: Experiences and Perceptions of the Urban Poor', *Environment and Urbanization* 23: 91

Kaime-Atterhög, W.; Lindmark, G.; Persson L.-A. and Maina Ahlberg, B. (2007) 'Burning "Centre Bolt": Experiences of Sexually Transmitted Infections and Health Care Seeking Behaviour Described by Street Boys in Urban Kenya', *Children and Youth Services Review* 29 600–17

Kimani, J. K.; Ettarh, R.; Kyobutungi, C.; Mberu, B. and Muindi, K. (2012) 'Determinants for Participation in a Public Health Insurance Program among Residents of Urban Slums in Nairobi, Kenya: Results from a Cross-Sectional Survey', *BMC Health Services Research* 12

KNUS (Knowledge Network on Urban Settings) (2008) 'Our Cities, Our Health, Our Future', report to the WHO Commission on Social Determinants of Health from the Knowledge Network on Urban Settings

Kohler, H.P. and Thornton, R. (2011) 'Conditional Cash Transfers and HIV/AIDS Prevention: Unconditionally Promising?', *World Bank Econ Rev*, 2 November

Lawn, S.D.; Bekker, L.G.; Middelkoop, K.; Myer, L. and Wood, R. (2006) 'Impact of HIV Infection on the Epidemiology of Tuberculosis in a Peri-Urban Community in South Africa: The Need for Age-Specific Interventions', *CID* 42

Mabala, R. (2006) 'From HIV Prevention to HIV Protection: Addressing the Vulnerability of Girls and Young Women in Urban Areas', *Environment and Urbanization* 18: 407

McCoy, S.I.; Kangwende, R.A. and Padian, N.S. (2009) 'Behaviour Change Interventions to Prevent HIV among Women Living in Low and Middle Income Countries: A Systematic Review', *3ie Systematic Review* 8

Madise, J.N.; Ziraba, A.K.; Inungu, J.; Khamadi, S.A.; Ezeh, A.; Zulu, E.M.; Kebaso, J.; Okoth, V. and Mwau, M. (2012) 'Are Slum Dwellers at Heightened Risk of HIV Infection than Other Urban Residents? Evidence from Population-based HIV Prevalence Surveys in Kenya', *Health & Place* 18: 1144–52

Magadi, M.A. (2004) 'Motherhood in the City: Poor Urban Women and Maternal Health Care Provision in sub-Saharan Africa', www.eldis.org/id21ext/h8mm2g2.html (accessed 23 September 2013)

Marshall, F.; Waldman, L.; MacGregor, H.; Mehta, L. and Randhawa, P. (2009) *On the Edge of Sustainability: Perspectives on Peri-urban Dynamics*, STEPS Working Paper 35, Brighton: STEPS Centre

Mayosi, B.; Flisher, A.; Lalloo, U.; Sitas, F.; Tollman, S. and Bradshaw, D. (2009) 'The Burden of Non-communicable Diseases in South Africa', *The Lancet* 374.9693: 934–47

MSF (Médecins Sans Frontières) (2005) 'The TB/HIV Time Bomb: A Dual Epidemic Explodes in South Africa 2005', *International Activity Report 2005*, www.doctorswithoutborders.org/publications/ar/report_print.cfm?id (accessed 10 September 2013)

Muggah, R. (2012) *Researching the Urban Dilemma: Urbanisation, Poverty and Violence*, Ottawa, Canada: International Development Research CentreMuntaner, C.; Lynch, J.W. and Davey Smith, G. (2003) 'Social Capital and the ''Third Way'' in Public Health', in R. Hofrichter, (ed.), *Health and Social Justice: Politics, Ideology, and Inequity in the Distribution of Disease*, San Francisco: Jossey Bass

Mutaner, C.; Lynch, J. and Davey Smith, G. (2001) 'Social capital, disorganized communities and the Third Way: understanding the retreat from structural inequalities in epidemiology and public health' *International Journal of Health Services* 31: 213–237

Mwakilishi.com (2012) '"How to Abort"' is 2012's Top Internet Search in Kenya – See Other Top Searches', www.mwakilishi.com/content/articles/2012/12/13/how-to-abort-is-2012s-top-internet-search-in-kenya-see-other-top-searches.html (accessed 10 September 2013)

Ochako, R.; Ulwodi, D.; Njagi, P.; Kimetu, S. and Onyango, A. (2011) 'Trends and Determinants of Comprehensive HIV and AIDS Knowledge among Urban Young Women in Kenya', *AIDS Research and Therapy* 8: 11

Odek, W.O.; Busza, J.; Morris, C.N.; Cleland, J.; Ngugi, E.N. and Ferguson, A.G. (2009) 'Effects of Micro-Enterprise Services on HIV Risk Behaviour Among Female Sex Workers in Kenya's Urban Slums', *AIDS Behaviour* 13: 449–61

Okech, T.; Wawire, N. and Mburu, T.K. (2011) 'Contraceptive Use among Women of Reproductive Age in Kenya's City Slums', *International Journal of Business and Social Science* 2.1

Peltzer, K.; Pengpid, S. and Skaal, L. (2012) 'Prevalence of Psychological Distress and Associated Factors in Urban Hospital Outpatients in South Africa', *South African Journal of Psychiatry* 18.1

Peltzer, K.; Seoka, P. and Raphala, S. (2004) 'Characteristics of Female Sex Workers and their HIV/AIDS/STI Knowledge, Attitudes and Behaviour in Semi-Urban Areas in South Africa', *Curationis* 27.1: 4–11

Raphael, D. and Bryant, T. (2003) 'The Limitations of Population Health as a Model for a New Public Health', in R. Hofrichter (ed.), *Health and Social Justice*, San Francisco: Jossey-Bass

Rehle, T.; Shisana, O.; Pillay, V.; Zuma, K. and Puren, A. (2007) 'National HIV Incidence Measures – New Insights into the South African Epidemic', *S Afr Med J* 97: 1947

Roma, E.; Buckley, C.; Jefferson, B. and Jeffrey, P. (2010) 'Assessing Users' Experience of Shared Sanitation Facilities: A Case Study of Community Ablution Blocks in Durban, South Africa', *Water South Africa* 36.5

Stephens, C. (2011) 'Revisiting Urban Health and Social Inequalities: The Devil is in the Detail and the Solution is in All of Us', *Environment and Urbanization* 23: 29

Stern, R.; Puoane, T. and Tsolekile, L. (2010) 'An Exploration into the Determinants of Noncommunicable Diseases among Rural-to-Urban Migrants in Periurban South Africa', *Preventing Chronic Diseases* 7.6: A131

Sverdlik, A. (2011) 'Ill-health and Poverty: A Literature Review on Health in Informal Settlements', *Environment and Urbanization* 23.1: 123–55

Tacoli, C. and Satterthwaite, D. (2013) 'Editorial: Gender and Urban Change', *Environment and Urbanization* 25: 3, http://eau.sagepub.com/content/25/1/3.full.pdf+html (accessed 20 September 2013)

Theobald, S. and Nhlema-Simwaka, B. (2008) 'The Research, Policy and Practice Interface: Reflections on Using Applied Social Research to Promote Equity in Health in Malawi', *Social Science and Medicine* 67: 760–70

Unger, A. and Riley, L. (2007) 'Slum Health: From Understanding to Action', *Plos Medicine* 4.10: 1561–66

UNAIDS 'Regional Factsheet sub-Saharan Africa 2012', www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/2012_FS_regional_ssa_en.pdf (accessed 20 September 2013)

UNESCO (2010) *Reaching the Marginalised: EFA Global Monitoring Report*, Oxford: Oxford University Press

UN-HABITAT (2013) 'Time to Think Urban: UN-HABITAT 24th Session Governing Council Nairobi, 15–19 APRIL', http://us-cdn.creamermedia.co.za/assets/articles/attachments/44263_state_of_women_in_cities_3457_alt.pdf (accessed 20 September 2013)

van Donk, M. (2002) 'HIV/AIDS and Urban Poverty in South Africa', a background paper prepared for the PDG/Isandla Institute Project 'The Role of Cities in Poverty Alleviation' for the South African Cites Network

Vearey, J.; Palmary, I.; Thomas, L.; Nunez, L. and Drimie S. (2010) 'Urban Health in Johannesburg: The Importance of Place in Understanding Intra-Urban Inequalities in a Context of Migration and HIV', *Health & Place* 16: 694–702

Vearey, J.; Richter, M.; Núñez, L. and Moyo, K. (2011) 'South African HIV/AIDS Programming Overlooks Migration, Urban Livelihoods, and Informal Workplaces', *African Journal of AIDS Research* 10.supplement: 381–91

Verver, S.; Warren, R.M.; Munch, Z.E. *et al.* (2004) 'Transmission of Tuberculosis in a High Incidence Urban Community in South Africa', *International Journal of Epidemiology* 33: 351–57

Vlahov, D.; Freudenberg, N.; Proietti, F. *et al.* (2007) 'Urban as a Determinant of Health', *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 84.1

Vlahov, D.; Galea, S. and Freudenberg, N. (2005) 'Urban Health: Toward an Urban Health Advantage', *Journal of Public Health Management and Practice* 11.3: 256–58

Vorster, H.H.; Venter, C.S.; Wissing, M.P. and Margetts, B.M. (2005) 'The nutrition and health transition in the North West Province of South Africa: a review of the THUSA (Transition and Health during Urbanisation of South Africans) study', *Public Health Nutrition* 8.5: 480–90

Vorster, H.H. (2002) 'The Emergence of Cardiovascular Disease during Urbanisation of Africans', *Public Health and Nutrition* 5.1A: 239–43Vorster, H.H.; Venter, C.S.; Wissing, M.P. and Margetts, B.M. (2005) 'The Nutrition and Health Transition in the North West Province of South Africa: A Review of the THUSA (Transition and Health during Urbanisation of South Africans) Study', *Public Health and Nutrition* 8.5: 480–90

Walsh, S. and Mitchell, C. (2006) '"I'm Too Young to Die"': HIV, Masculinity, Danger and Desire in Urban South Africa', *Gender and Development* 14.1: 57–68

Williams, G.H. (2003) 'The Determinants of Health: Structure, Context and Agency', *Sociology of Health and Illness* 25: 131–54

Wojcicki, J.M. (2002) '"She Drank His Money": Survival Sex and the Problem of Violence in Taverns in Gauteng Province, South Africa', *Medical Anthropology Quarterly* 16.3: 267–93

World Bank/IMF (2013) 'Global Monitoring Report: Rural-Urban Dynamics and the Millennium Development Goals', http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1327948020811/8401693-1355753354515/8980448-1366123749799/GMR_2013_Full_Report.pdf (accessed 20 September 2013)

World Health Organization (WHO) (2010a) 'Urbanization and Health', *Bulletin of the World Health Organization* 88.4: 245–245

World Health Organization (WHO) (2010b) 'Hidden Cities: Unmasking and Overcoming Health Inequities in Urban Settings', *Bulletin of the World Health Organization* 126

World Health Organization (WHO) (2008) *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health. Commission on Social Determinants of Health Final Report*, Geneva: World Health Organization

WHO and UNICEF *Joint Monitoring Programme for Water Supply and Sanitation (2008) Progress on Drinking Water and Sanitation: Special Focus on Sanitation*, New York: UNICEF and Geneva: WHO

Ziraba, A.K.; Mills, S.; Madise, N.; Saliku, T. and Fotso, J.C. (2009) 'The State Of Emergency Obstetric Care Services in Nairobi Informal Settlements and Environs: Results From a Maternity Health Facility Survey', *BMC Health Services Research* 9: 46

Zulu, E.M.; Beguy, D.; Ezeh, A.C.; Bocquier, P.; Madise, N.J.; Cleland, J. and Falkingham, J. (2011) 'Overview of Migration, Poverty and Health Dynamics in Nairobi City's Slum Settlements', *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 88.Suppl 2

Zulu, E.M.; Dodoo, F.N. and Ezeh, A.C. (2002) Sexual Risk-Taking in the Slums of Nairobi, Kenya, 1993–98', *Population Studies: A Journal of Demography* 56.3: 311–23

Brighton BN1 9RE

T +44 (0)1273 606261
F +44 (0)1273 621202
E ids@ids.ac.uk
www.ids.ac.uk