Stronger health systems. Greater health impact.

Urban Health Overview

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APHA, CBPHC Workshop
November 7, 2009

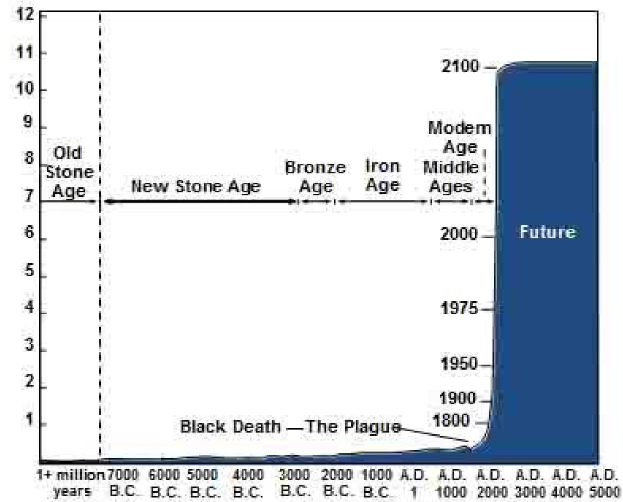
During past centuries, cities have been a beacon of hope and opportunity –but this slide depicts [Slide 2] the unfortunate reality of far too many urban

families. The so-called " Century of the City" features a new urbanization characterized by: rapid growth; an upsurge in poverty; and a proliferation of

slums, each with their specific attendant effect on municipal governance, the economy, the environment and health.

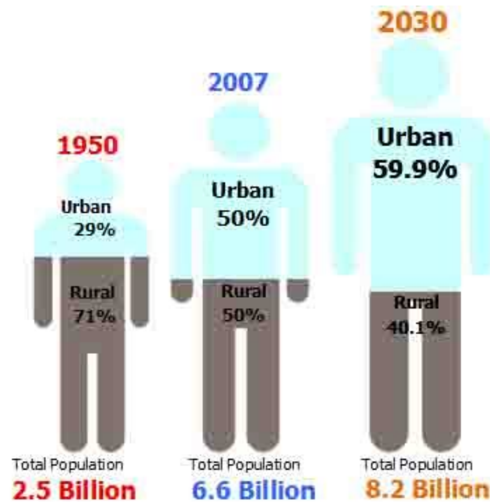
World Population Growth Through History

Billions



Source: Population Reference Bureau; and United Nations, *World Population Projections to 2100* (1998).

Global Population Growth Trends



Source: Courtesy of David Vlahov, Ph.D., R.N., Senior Vice President for Research, New York Academy of Medicine

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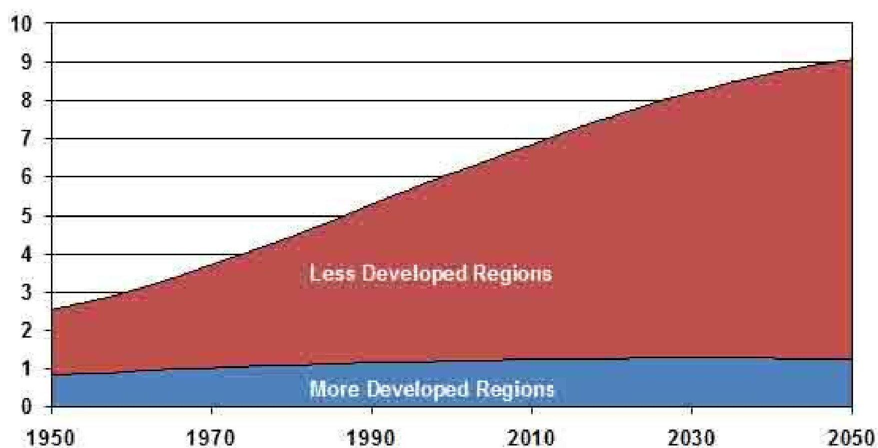
[Slide 3] In 2007, for the first time, the majority of the global population – approximately 3 billion people were living in cities. UN projections suggest that this proportion will continue to increase so that by 2030 nearly two-thirds of the global population will be in urban areas; which means that for the first time, more people in the developing world will live in urban than in rural communities.

Growth in More, Less Developed Countries

Billions



Source: United Nations, *World Population Prospects: The 2004 Revision* (medium scenario), 2005.

n fact, as this slide illustrates in the rising blue curve, most of the growth over the next 30 years will be in developing countries. But, contrary

to popular perceptions, most of this growth will not occur in the megacities,but in towns and small cities, where the majority of urban dwellers reside.

Of particular relevance to MNCH is the fact that *SubSaharan Africa* has the highest annual urban growth at 4.2% per annum and is urbanizing faster

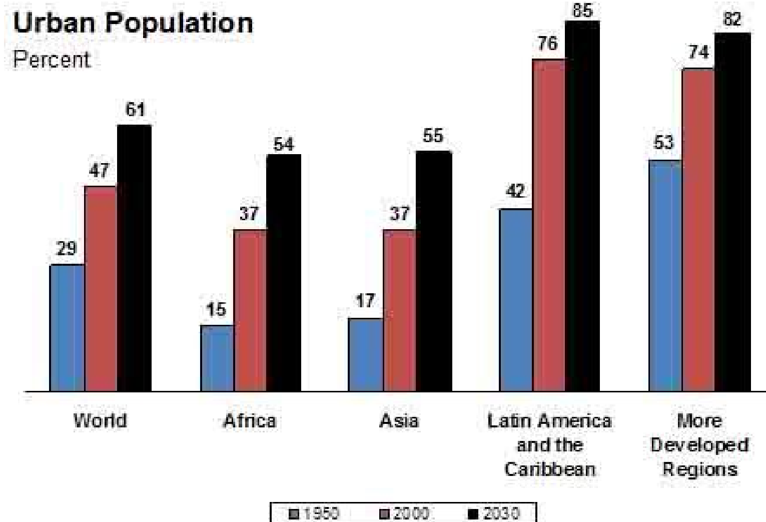
than any other continent. An average SSA main city can be expected to have 5-6% growth per annum, but not with commensurate economic growth and

redistribution to alleviate poverty. The main driver to urbanization in developing countries, and most specifically in Africa, is natural increase, though Rural-urban migration and

reclassification of urban limits, accounts for about 40% of the growth in developing countries. Quite obviously family planning and healthy spacing

and timing of pregnancy must become major components of any urban MCH health package.

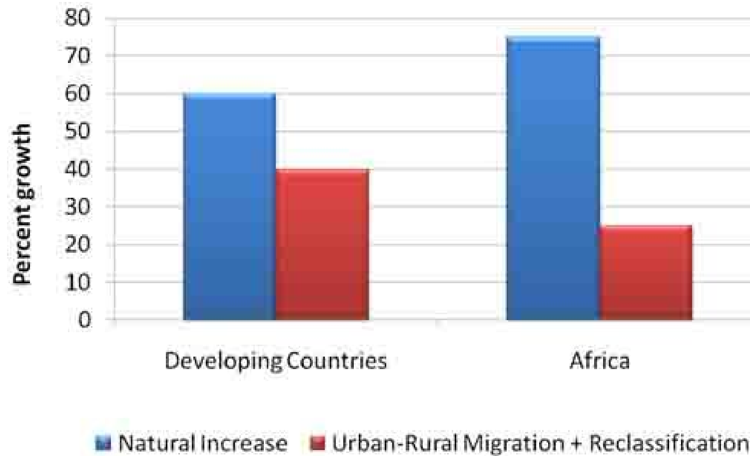
Trends in Urbanization, by Region



Source: United Nations, *World Urbanization Prospects: The 2003 Revision* (medium scenario), 2004.

- Currently, world regions differ greatly in their levels of urbanization. In more developed regions and in Latin America and the Caribbean, over 70 percent of the population is urban, whereas in Africa and Asia, under 40 percent of the population is urban. By 2030, however, the urban proportion of these two regions will exceed 50 percent.
- By 2030, roughly 60 percent of the world's population will be living in urban areas.

Natural Increase is the Main Source of Urban Growth in the Developing World



Source: Ezeh, Alex. *Population Growth, Poverty & RH: Revisiting The Urban Advantage.* African Population and Health Research Center. Presented at the Foundation Presidents Meeting, Population and Reproductive Health, in Seattle, WA. 10 Jan. 2008.

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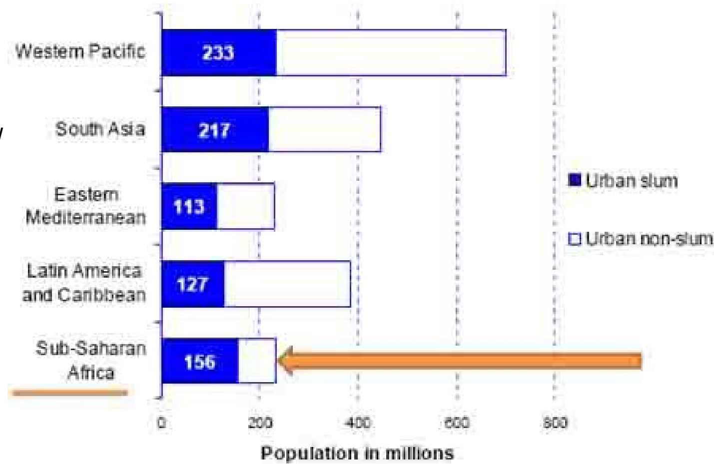
Natural increase, the difference between birth rates and death rates, accounts for 60% of urban growth in the Africa. Rural-urban migration, which often receives the most attention, and the changing of the classification of some areas formerly designated as rural into urban areas account for only 40% of urban growth. As I show later, most of these births in urban areas are largely unwanted and in situations where there are restrictive abortion laws, the high level of unwanted births in urban areas have huge implications for maternal and child health outcomes.

Urbanization and Poverty

•The global slum population is 1 billion; estimated to be nearly 2 billion by 2030

•In sub-Saharan Africa, 67% of the urban population live in slums…



Source: Mercado, S., et al. Urban Poverty: An Urgent Public Health Issue. *Journal of Urban Health*, Vol. 84, No. 1 (May 2007 Supplement).

[Slide 5] Another glaring reality of urbanization is poverty -globally, an estimated **1 billion** people are living in urban slums. By 2030, many expect

this number to increase to **2 billion.**

Let's put this in perspective for MDG 4---If, for simplicity, we estimate that 15% of these people are under 5years of age approximately ***150 million children under 5 may be living in urban slums worldwide, and unless actions are taken, this may increase to 300 million in 20 years!.***

However, as shown in this slide, the % of urban populations living in slums (in bright blue) varies across regions, with the largest absolute numbers in

the Western Pacific and South Asia (top two bars), while the highest % , 67% of the urban population living in slums can be found in sub-Saharan

Africa. Within the next decade, a majority of the world's slum dwellers will be in SS Africa

Intra-Urban and Urban-Rural Variation in IMR and U5MR: Nairobi, Kenya

Location	IMR (per 1,000 live births)	U5MR (deaths per 1,000 children)	% prevalence of diarrhea in children under 3
Kenya, nationwide	74	112	3
Rural Kenya	76	113	3
Urban Kenya, excluding Nairobi	57	84	2
Nairobi – all areas	39	62	3
High income area	**<10**	**<15**	--
Informal settlements	**91**	**151**	11
—Kibera settlement	*106*	*187*	*10*
—Embakasi settlement	*164*	*254*	*9*

Source: Patel, Ronak, Burke, Thomas. (2009). Urbanization – An humanitarian disaster. *New England Journal of Medicine*, Vol. 361, No. 8, p741-743. Original source: *Population and health dynamics in Nairobi's informal settlements: Report of the Nairobi Cross-sectional Slums Survey (NCSS) 2000.* Nairobi: African Population and Health Research Center, 2002.

[Slide 6] Although I will use only one example from Kenya and one from India, numerous other countries have confirmed significant intra-urban

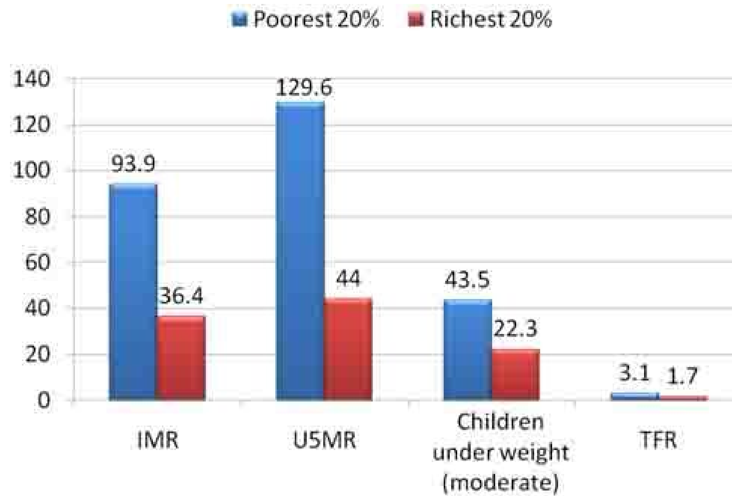
variation in mortality and access to proven MNCH interventions - Egypt, Ghana, Bangladesh and Pakistan to name a few.

In Nairobi, there is a 9-10 fold increase in IMR and U5MR in the informal settlements when compared with Nairobi's high income area.

Of particular note – this striking difference is lost if we only look at the aggregate figure for Nairobi. And if we compare the rural Kenyan rates with

urban Kenyan rates (or all areas of Nairobi), it appears that urban infants in Kenya have a distinctive advantage to their rural counterparts!

Intra Urban Variations in IMR and U5MR: India



Source: Ramana, G.N.V., Lule, Elizabeth. Reaching primary health services for the urban poor: lessons from India urban slums project. The World Bank

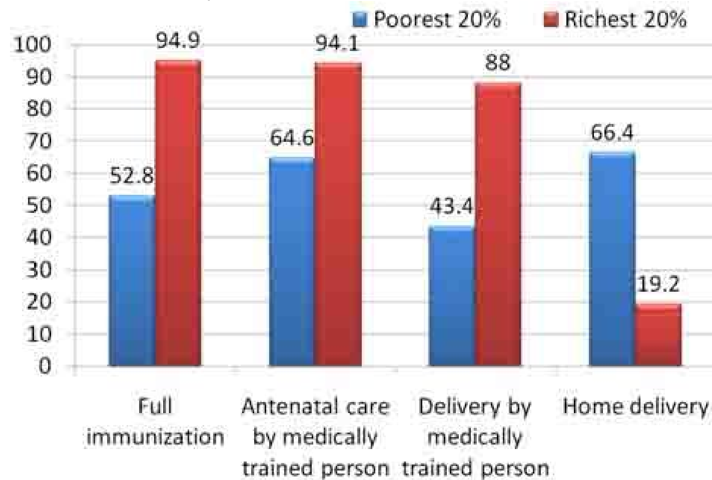
1994-2002 Banglaore, Delhi, Hyderabad and Kolkata plus 94 smaller towns and cities in Andhra Pradesh, Karnataka, and West Bengal

TFR and IMR decline , increased immun coverage, CPR, prenatal care and institutional deliveries plus unmeasurable others

Improved access, quality and increased demand; management strengthening

Intra-Urban Inequities in Access to Basic Reproductive and Child Health Services: India

(India: NFHS 98–99)



Source: Ramana, G.N.V., Lule, Elizabeth. Presentation: *Reaching primary health services for the urban poor: lessons from India urban slums project.* The World Bank (date unknown).

[Slide 7] Not surprisingly, this same intra-urban inequity appears in regard to use of proven MNCH and FP services in this slide from India; when

comparing wealth quintiles – the richest 20% (in red) have a much higher rate of complete immunizations, and are more than twice as likely to have a

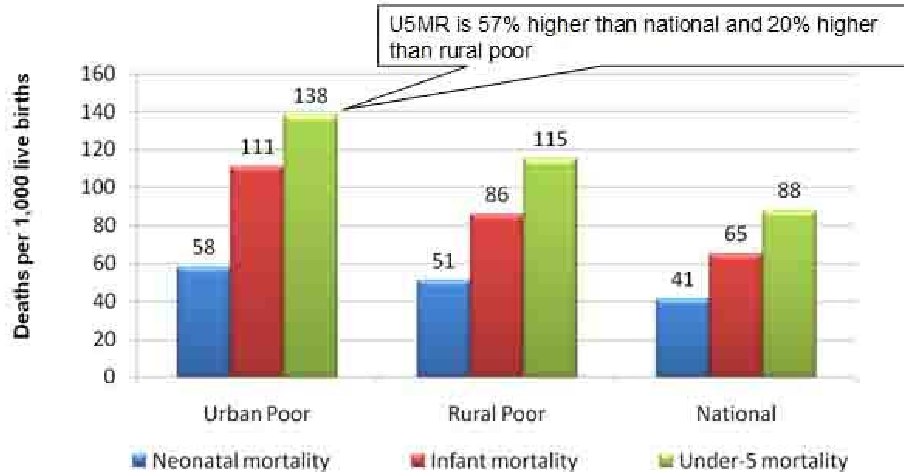
medically trained person attend their delivery, while the lowest quintile (in blue) is almost 3.5 times more likely to have a home delivery, as shown in

the cluster to the right.These slides starkly illustrate the myth behind an urban advantage – at least for the urban poor women and young children living in slums – whether in Asia or Africa. Furthermore, there is growing evidence from groups like the Urban Resource Center in India that many slums are not registered, hence not counted in the census or the sampling frames. Thus we may well be **under-estimating slum populations**, **the mortality in these populations and hence overall infant and child mortality.**

Considering these trends in urbanization, poverty and increased infant and child mortality associated with urban poverty, it is obvious that urban health

must be front and center to reach MDGs 4 and 5, and that collaborative, synergistic action with MDG7 is needed.

Urban-Rural Mortality Variation: Bangladesh



Source: Saha, Subir Kumar . Presentation: *Poor rich inequalities in the health and survival of urban children in Bangladesh.* Presented at the International Conference for Urban Health, Baltimore, MD , Nov. 1st, 2007. Concern Worldwide.

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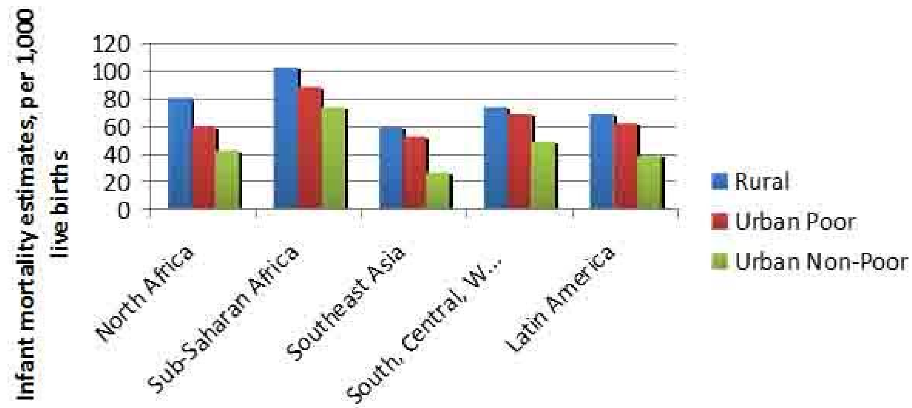
[Slide 8] This slide from Bangladesh (thanks to Concern Worldwide) illustrates that Under-5, Infant and Neonatal mortality rates are considerably

higher among the urban poor (the cluster to the left) when compared to national (on the right) as well as to rural poor (the middle cluster). U5MR

shown in green is higher in the urban poor by 57% compared to the national rate and 20% higher than the rural poor rate.

Urban- Rural Comparison: Infant mortality estimates



Source: Montgomery, Mark. Urban health in poor countries: interventions, evaluation, and research needs. Center for Global Development Consultation Meeting on Urban Health, 2008.

Urban Causes of Child Mortality are Similar to Rural: Kenya

Top five causes of premature mortality among children under the age of five years ranked by percentage contribution to the total years of life lost (YLL) in the Nairobi DSS (2003-2005)

Causes	YLL	% YLL	Rank
Pneumonia	3463	22.8	1
Diarrhoeal Diseases	2969	19.5	2
Stillbirths	2480	16.3	3
Malnutrition and Anaemia	1275	8.4	4
Birth Injury and/or Asphyxia	661	4.3	5

Pneumonia, Diarrheal Diseases, and still births* account for nearly **60%** of the mortality in children under five in these slums.

*This study took place in two urban slums, Korogocho and Viwandani, with a population of about 56,000 persons.

Source: The burden of disease among residents of Nairobi's informal settlements. *APHRC* No. 1, 2008, Policy Brief.

*In countries with a similar mortality pattern as Kenya, one in five children die within 28 days of birth. In Nairobi slums, around 33% (one in three) children die within 28 days.

[Slide 9] Most importantly, as seen in this slide from Kenya (but corroborated in other developing countries in Africa and Asia), the most

common causes of child mortality are the same as in rural settings, namely pneumonia and diarrhea. Thus, the crucial difference between urban and

rural health lies not in the interventions themselves, but in the DELIVERY of the interventions…and frankly, in the **lack of an urban health system** to

ensure that healthcare reaches needy, urban poor children and women.

Lessons Learned from Successful Urban Health Projects with Documented Improvements in MNCH and FP/RH (1)

1. Recognize and ensure community involvement, empowerment, and harness local initiative
2. Coordinate across multiple stakeholders; opportunity for innovative partnerships
3. Invest in local analysis, mapping, and data collection
4. Adapt interventions to local needs—no simple solutions or standardized delivery
5. Plan for sustainability, financial and institutional
6. Build management that is accountable for results
7. Undertake advocacy and policy reform along with implementation

Let's now turn to the evidence, really the lessons learned from urban MNCH projects [Slides 10 and 11]

1. Community involvement, empowerment and initiative essential.We cannot succeed without involving the community members themselves, and building on their base of local knowledge and innovation. This message was strongly reinforced during the Community Voices Forum on Sunday.
2. Ensure coordination across multiple stakeholders; take advantage of the opportunity for innovative partnerships

Between public and private sectors, between business, govt and community

3. Invest in local analysis, mapping and data collection processes for credible results
4. Adapt interventions to local needs – no simple solutions or standardized delivery approach that will work for every slum. But there is an overall health systems framework that can be applied to scale up the local interventions.
5. Plan for sustainability, financial and institutional from the start.
6. Build management that is accountable for results
7. Undertake advocacy and policy reform, along with implementation

Lessons Learned from Successful Urban Health Projects with Documented Improvements in MNCH and FP/RH (2)

8. Incorporate intersectoral collaboration and cost-sharing, cross-cutting support systems
9. Recognize and utilize urban networks and diversity of communities
10. Leverage urban advantages

Invest in people and relationships

8. Incorporate inter-sectoral collaboration and cost-sharing, cross-cutting support systems

As we heard during the Urban Health Champions Forum on Monday, urban health includes water and sanitation, housing, transport, and security – success demands multisectoral planning and implementation

9. Recognize and utilize urban networks and diversity of communities

Urban communities are not all geographically proximal – virtual communities linked by culture, interests or technology may be more important than geographic location. The diversity of urban settings generates multiple networks which have immense potential.

10. Leverage urban advantages

Diversity, geographic proximity, density, access to technology, openness to new ideas and practice, education, innovation – all urban characteristics we must leverage to reach MDGs

Bottomline - **Invest in people and relationships**