Rapid urbanization has been taking place in Kenya – as in much of sub-Saharan Africa – largely in a context of weak economic development and poor governance. As a result, local and national authorities have not been able to provide decent living conditions and basic social services sufficient to meet the needs of a growing urban population. Between 1980 and 2009, the number of people living in Nairobi, the capital, increased from 862,000 to about 3.4 million. Estimates (2007) indicate that around 60 per cent live in slums covering only 5 per cent of the city’s residential land. Moreover, emerging evidence reveals that the urban population explosion in the region has been accompanied by increasing rates of poverty and poor health outcomes. The incidence of child undernutrition, morbidity and mortality has been shown to be higher in slums and peri-urban areas than in more privileged urban settings or, sometimes, even rural areas.

**Access to health services**

In Nairobi slums, public provision of health services is limited. A study conducted in 2009 shows that out of a total of 503 health facilities used by residents of three slum communities (Korogocho, Viwandani and Kibera), only 6 (1 per cent) were public, 79 (16 per cent) were private not-for-profit, and 418 (83 per cent) were private for-profit. The last category largely consists of unlicensed and often ramshackle clinics and maternity homes, with no working guidelines or standard protocols for services. Yet these substandard facilities are exactly where most local women go for maternal and child health care – seeking better-quality options only once complications occur. In contrast to public services, which seldom extend to informal settlements, these private facilities are perceived as friendly, accessible and trustworthy, perhaps because they invest more time in building relationships with patients. Only a small proportion of the urban poor has access to more reliable maternal health care services, including those offered at clinics and hospitals run by missionaries and non-governmental organizations.

**Urban child undernutrition**

In developing countries, child undernutrition remains a major public health concern. Both a manifestation and a cause of poverty, it is thought to contribute to over a third of under-five deaths globally. Insufficient nutrition is one of a wide range of interlinked factors forming the so-called poverty syndrome – low income, large family size, poor education and limited access to food, water, sanitation and maternal and child health services.

Stunting, underweight and wasting – measured by height-for-age, weight-for-age and weight-for-height, respectively – are the three most frequently used anthropometric indicators of nutritional status. Stunting is considered the most reliable measure of undernutrition, as it indicates recurrent episodes or prolonged periods of inadequate food intake, calorie and/or protein deficiency or persistent or recurrent ill health. Children are stunted if their height-for-age index falls more than two standard deviations below the median of the reference population; they are severely stunted if the index is more than three standard deviations below the median. Stunting prevalence is a useful tool for comparisons within and between countries and socio-economic groups.

Figure 2.3 portrays the magnitude of inequities in child undernutrition by comparing average stunting levels for urban Kenya against data collected between 2006 and 2010 in the Korogocho and Viwandani slum settlements. The study covers all women who gave birth in the area. The children’s measurements were taken periodically up to 35 months of age.

As the graph demonstrates, the prevalence of stunting among children living in slum areas increases sharply from less than 10 per cent during the first few months of life to nearly 60 per cent in the group aged 15–17 months, and then remains at that level. In urban Kenya overall, the prevalence of undernutrition reaches a maximum of 35 per cent among children aged 15–17 months, then declines to around 25 per cent. The gap between the poor (here, slum residents) and the non-poor in Kenya widens from this point. For example, among children above 15 months, the prevalence of stunting stands at around 57 per cent in the slums and nearly 28 per cent in urban Kenya as a whole. Separate analysis (not illustrated in Figure 2.3) reveals that the prevalence of stunting among the urban rich is close to 21 per cent, suggesting
that children in urban poverty are nearly 2.7 times as likely to be stunted.

Effective interventions to reduce child undernutrition may include micronutrient supplementation (iodine, iron and vitamin A); food supplementation (for micronutrient deficiencies); infection prevention and treatment; growth monitoring and promotion; education about infant feeding practices (breastfeeding and complementary feeding); and school feeding programmes.

If the needs of the urban poor are not addressed, progress towards achieving the Millennium Development Goals (MDGs) may be at stake, especially Goals 1 (eradicating extreme poverty and hunger), 4 (reducing child mortality) and 5 (improving maternal health). In addition to a strong focus on health and nutritional interventions (e.g., antenatal, maternal and neonatal care, immunization, appropriate feeding practices), the importance of reproductive health is being recognized in this context, as family planning can be a cost-effective and high-yield approach to improving the health of mothers and children. The Urban Reproductive Health Initiative, sponsored by the Bill & Melinda Gates Foundation and currently implemented in selected urban areas of India, Kenya, Nigeria and Senegal, is an example.

The programme seeks to significantly increase modern contraceptive prevalence rates – especially among the urban and peri-urban poor – through integrating and improving the quality of family planning services, particularly in high-volume settings; increasing provision, including through public-private partnerships; and dismantling demand-side barriers to access.

by Jean Christophe Fotso

The African Population and Health Research Center (APHRC) is an international non-profit organization whose mission is to promote the well-being of Africans through policy-relevant research on key population and health issues. Originally established as a programme of the Population Council in 1995, APHRC has been autonomous since 2001 and now has offices in Kenya, Nigeria and Senegal. The Center focuses on research, strengthening research capacity and policy engagement in sub-Saharan Africa.

Figure 2.3. Stunting prevalence among children under 3 years old: Comparing the Nairobi slums with overall urban Kenya