Response of health systems to urbanization in developing countries

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Equity in access to health care is now accepted as a basic ethical principle for health development. The glaring inequalities in health suffered by poor people living in slums are a strong justification for urgent action. The problem is rapidly increasing.

In the wake of the industrial revolution, peasants started moving into towns in the industrializing countries and there began a slow but steady growth in urban populations. At the beginning of the nineteenth century only 3% of the world’s population lived in towns. After the Second World War, larger numbers of people started gravitating towards cities and towns at an ever-increasing speed, particularly in the newly independent and Latin American countries. The last 30 years have witnessed the most spectacular transformation of the human habitat in history. The first decade of the twenty-first century will see the urban population continue to grow rapidly in developing countries, reaching a total of 3000 million (see Fig. 1). The rural population will stagnate or diminish (see Fig. 2). In many urban settings, natural growth will become the main factor responsible for the population increase.

Huge human agglomerations seem to outgrow the capacity of political and administrative systems to manage them. Cities of eight million inhabitants or more have attracted much attention because of the dramatic environmental, social and health problems which they face. By the year 2015, about 20% of the urban population of the developing world will be living in 27 megacities. A further 28% will be living in some 700 cities of over half a million inhabitants, many of which will face the problems of rapid and uncontrolled growth combined with weak administrative structures and limited resources. The rest of the population will be living in smaller towns where the human, social and physical environment is more easily preserved, but many of those towns are also growing very rapidly.

Mass migration to towns is due to both the “push” away from the harsh conditions of rural life and the “pull” of city opulence. Many migrants succeed in building a better life. But many others settle under precarious conditions, surviving as best they can in what has been called the “asphalt jungle”. Poor, unemployed, illiterate and malnourished, they seem trapped in a life of squalor, social and family disintegration, disease and hopelessness. Many are illegal residents,
Fig. 1
Urbanization trends and projections

Fig. 2
Urban and rural populations in developing countries


living in makeshift houses on land unsuitable for human settlements, with no access to social and other essential services which are normally available to recognized citizens, such as piped water, drainage, refuse collection, public transport, all-weather access roads, schools and primary health care.

Low-income groups in many developing cities live in degrading and unhealthy environments. Between a quarter and a half of the inhabitants live in grossly substandard housing, more often than not built of such materials as cardboard, scrap wood and flattened kerosene cans. Human excreta seeps into the streets and garbage piles up in alleys and courtyards. Water fit to drink has to be carried from far away or bought from ambulant water sellers at up to ten times the price paid by their more fortunate neighbours in the affluent parts of the town. Many sleep in the streets or in public places such as parks and railway stations.

Many developing cities and periurban areas have high concentrations of industries relocated from richer countries, which are often highly polluting. Motor transport is considerable, often with engines that are old and badly tuned and use leaded fuel. Heating and cooking appliances cause indoor pollution, and cigarette smoking – which is as widespread as in richer homes – adds to the risk of respiratory and other health problems.

Work is difficult to find, salaries are low, accidents frequent, and social welfare and job security often nil. In shanty towns the social tissue is often weak, with little social cohesion and organization; this can result in hopelessness, lawlessness and brutality, drug abuse, alcoholism and mental deprivation.

Triple burden of disease

The term “health transition” refers to the effects of socioeconomic development on demographic change – in terms of fertility, mortality and population distribution – and the consequent change in disease patterns: the growing incidence of cancer, heart disease, diabetes and other lifestyle-related diseases, and of suicide, violence and the harmful effects of alcohol, drug and tobacco use. In rich countries, transition has generally taken place after rapid reduction of infectious and parasitic diseases. In many developing countries,
however, such diseases have continued almost unabated while the noncom-
municable diseases have been growing in importance. Hence the term “double burden of disease” to describe their health situation.

In the shanty towns of the developing world, we can talk of three groups of health hazards operating simultaneously. The first group relates to poverty, lack of water and sanitation, and substandard housing, resulting in the classic patterns of infectious and parasitic diseases and malnutrition.

The second group includes ill-health due to changes in living conditions and lifestyle: cancer, heart disease and diabetes due to increased intake of sugar, animal fats and other saturated fats and to dietary changes related to “modernization”; lung diseases due to air pollution from industry, cars and cigarette smoking; accidents at home, at work and on the roads; and mental and psychosomatic disorders due to stress, noise and other aspects of modern city life.

A third dimension is now being documented: social instability, cultural and social alienation, and social and mental ill-effects of degrading living conditions and extreme crowding. All these factors involve the breakdown of value systems and respect for others. A rapidly changing physical environment, insecurity, weak sociopolitical structures and a sense of helplessness can lead to crime, violence, drug abuse, sexual promiscuity and prostitution, AIDS, and family breakdown. The result is likely to be further exclusion from mainstream society and antagonism to the established order.

This “triple burden of disease”, combined with scarcity of means to promote health and prevent illness, amounts to the drama which is known as the urban health crisis.

**Blaming the victims**

Inhabitants of slums and shanty towns have been characterized as socially, spatially and politically marginal. The mass media, perhaps with the laudable intention of creating a climate of support from the better-off, have been active agents in the process of marginalization. The result is that slum-dwellers are often seen as the products of their own irresponsibility rather than as the victims of the shortcomings of society. The frequently paternalistic approach of the past has been replaced by a feeling that little can be done to help. The more fortunately placed are content to wait in the hope that overall socioeconomic development will take place and that the benefits will eventually trickle down to passive, apathetic islands of despair in the shanty towns.

New data, new insights and new models of how societies function now tend to show that the “culture of poverty” is not the cause of the problem but the result of malfunctioning sociopolitical systems.

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often based on the acceptance of gross inequalities. Shanty-town inhabitants have not been given a fair share of resources and opportunities, and they are relatively powerless politically.
Although deprived of their traditional social structures of the village, the people of the shanty towns do not live in a social vacuum and are often not as passive as people think. They create new social structures adapted to the realities of their lives, based on ties of friendship, kinship, ethnicity, caste or religion. Community organizations are active in protecting the interests of local inhabitants by improving water supplies, roads and drainage or by lobbying city and other authorities to provide basic services such as health care and education. Women’s groups establish and run preschool centres, organize training courses, and promote healthy practices such as breastfeeding.

**Urban health care**

Urban health care absorbs the major part of most national health budgets, mainly because large specialist hospitals are located in the cities. Health centres and private health practitioners are also more likely to be found in towns and cities. And yet, many people in the surrounding shanty towns and slums have no access to the city’s services or do not use them because they do not respond to their needs. The basic principles of primary health care are not applied: low priority is usually given to first-level health care, and up to 85% of funds are spent on curative services. Health management is often inefficient, lax and without leadership.

Social and cultural distance between health workers and their clients often leads to what the clients perceive as non-caring attitudes, resulting in underutilization of health facilities. On the other hand, overcrowded health centres may lead to excessive time-saving procedures, with lack of empathy from overworked staff, and community dissatisfaction.

Social systems in shanty towns change rapidly: people move in and out, interest groups are created and disbanded. Social coherence is often based on ethnicity, religion or geographical origin rather than on the common interests of a neighbourhood. Community participation, therefore, cannot be based on the same principles as in more stable human groupings, since collective responsibility does not necessarily relate to a specific part of the city. The fight for survival in an often hostile environment – sometimes dominated by gangs and other power groups – and mistrust of established authority may create reflexes of withdrawal from civic life. Protective reflexes and loyalties may not be the best basis for participation of the community in health development.

**Process of change**

Experience in a number of countries has shown that much can be done to improve urban health when political will is clearly expressed, and when adequate data are available to document the situation (1). WHO has supported health efforts in a number of large cities in developing countries. Such undertakings have clearly brought out the need for change, and many have resulted in development activities which have contributed to improving urban health care.
Some of WHO’s special programmes have also shown how concerted efforts can work as well in shanty towns as elsewhere, if they respond to needs, involve the community – especially mothers – and use innovative approaches. For example, the systematic use of oral rehydration solutions to treat diarrhoea has reached a larger part of the low-income population in urban than in rural areas, because mothers are eager to participate when a rational programme is available to solve their problems. Well-organized immunization programmes are also welcomed in disadvantaged areas, receiving full cooperation from the inhabitants and from their community groups.

A new, more dynamic image of the population in shanty towns and slums must be created, which is more closely related to the complex reality than the merely negative image of misery, hopelessness and dependency. A communication strategy should be implemented to foster political and popular support for the changes needed to help the urban poor help themselves. Such a strategy should incorporate the media and, in the name of equity and social justice, should aim to provide the excluded populations in towns and cities with a fair share of government budgets.

**Urban health policies**

Policies must be developed to deal with the major health problems, not omitting signs and causes of ill health such as violence and drug abuse, which relate to the third part of the triple burden of disease. While not specific to poor urban areas, such problems are more likely to be found there. Pregnancies – too early, too late, too many and too frequent – are important risk factors for women in fertile age-groups and for their dependent children. The severely overcrowded conditions in shanty towns and slums provide an additional reason for serious consideration being given to making appropriate family planning services available to all who want them. Statistics on health and health services are also in need of policy guidelines for their collection, compilation, distribution and utilization. All too frequently, data are collected and compiled, but then lost forever.

Decentralization has long been an agreed principle of good health management. Reality shows, however, that although responsibilities have been given to local authorities for implementation of programmes, there has been little or no transfer of authority in areas such as budgeting, ordering of supplies and drugs, or the management of staff and in-service training.

**Hospitals and reference health centres**

Hospitals absorb the major part of national health budgets. They provide essential specialized health care, but their outpatient departments often deal with minor ailments which could be handled just as well – and more cheaply – at a well-organized local health centre; the hospital staff would then have more time to deal with complicated cases. However, because referral systems are either nonexistent or inoperational, the technical excellence of hospitals is not perceived as a support to health centre activities. In spite of the overall concentration of health facilities and services in the cities, the availability of good health care tends to vary inversely with the needs of the population to be served. The conditions in, and the functioning of, existing health units – especially at the periphery and in the poor
areas of cities – leave much to be desired, including the suitability of physical structures, supplies and equipment, the behaviour and professional competence of the personnel, and the inconvenience of opening hours. These situations cause the urban poor to go to hospitals, which are therefore crowded with people with minor ailments. Consequently, the quality of hospital services suffers and the users become dissatisfied.

A more active role for hospitals has been defined and successfully tested (2). In some large cities, the need has been felt for an intermediate stage between peripheral health centres and the specialized hospitals. Over the last 15 years a number of “reference health centres” have therefore been created by upgrading existing health centres or establishing at least one with the necessary capability in each urban district. These centres can deal with cases referred from other health centres within their catchment areas or refer them to specialized hospitals; they act as a source of reference for other health centres in a defined geographical area, to support and strengthen local primary health care and to improve access to quality services. Comprehensive general health care can be provided in these centres, thus freeing hospitals to deal with more complicated cases and referrals.

Experience gained from WHO-supported activities in cities such as Bangkok, Bombay, Cairo, Cali, Harare, Jakarta, Manila and New Delhi shows that reference health centres are not magic solutions to all the problems facing urban health development. Many constraints, such as government rules and procedures, act as barriers to innovative action. But many problems have been solved, proving that the concept of reference health centres is worth pursuing in the absence of any valid alternative.

**Health workers**

Around the world, in countries at all stages of development, experience in urban health systems and their organization has provided many useful insights into differing local conditions. One of the main elements highlighted as facilitating urban health development is the training of health workers.

Success in primary health care calls for outreach activities in health promotion and disease prevention measures, in addition to patient care with appropriate technologies. The involvement of health workers in educational activities in schools, for example, should not be left to individual enthusiasm and one-time initiatives but should be part of a school health curriculum, to be introduced into all schools and adapted as necessary.

Training of health workers has traditionally emphasized curative and inpatient care. But there is great opportunity for change, as shown by their successful participation in urban health programmes and special programmes such as the Expanded Programme on Immunization and the use of oral rehydration therapy. Lasting change in urban health care requires
retraining of staff to perform new duties: development of management, social, political and communication skills will enable them to work with the local community, other sectors and the media in improving the health of the urban poor.

The search for facts

Availability of reliable data is essential for urban health development. Long-term, all-inclusive and expensive surveys are not necessarily the best instruments for change: they are at times more profitable to the academic progress of the researchers than to the improvement of health status among the urban poor. Reports of pilot projects abound, but few efforts have been made to draw conclusions and to use the findings to promote new ideas and speed up change in urban health programmes.

The selection of study populations, variables and study designs must be geared to providing timely information which can be used to solve specific problems — or at least as useful background for change. This implies rapid appraisal and operational research techniques; the participation of populations under study, health workers and decision-makers; and systematic use of the findings in planning, programming and reorientation of health care systems.

By the year 2010 a total of 3000 million people will be living in the urban areas of the developing countries, perhaps half of them in great poverty. Industrialized countries already have problems in providing health care to slum areas. How will poor countries be able to cope? Hope lies in the new social structures that are created and in the community organizations which have sprung up and are sustained by the untiring efforts of the populations themselves.

Urban health services have developed slowly over the years, usually with little or no consideration of the special problems and needs of the poor and the disenfranchised. No real change will take place before health policies are specifically developed for urban areas, policies which must be clearly expressed and promoted by national and municipal leaders. The establishment of networks with local organizations will be essential in order to

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involve the population in planning and providing resources (such as time and money), and to give the people a real say in how services are provided. ■

References
