Morris Schaefer

Home and health—on solid foundations?

This article is based on a WHO survey confirming that a large part of humanity lacks adequate shelter or knowledge of how to obtain the best possible health benefits from housing. The reasons for this state of affairs, and the health sector's role in overcoming it, are discussed.

During the 1960s, WHO issued guidelines on the public health aspects of housing (1), the appraisal of hygienic conditions (2), and the health considerations pertaining to metropolitan planning and development (3). “Health begins at home” was the theme of World Health Day in 1973. The phrase recurs often in advocacy for primary health care, with its linkages to personal responsibility for health, community self-reliance, nutrition, health education, disease control, and the provision of safe water and sanitation.

The relationship between housing conditions and health has been codified (4). Protection against communicable diseases requires an adequate and safe water supply, disposal of excreta and solid wastes, drainage of surface water, facilities for personal and domestic hygiene and sanitary food preparation, and structural safeguards (including adequate interior space) against disease transmission. Protection against injury, poisoning and chronic disease requires safe furnishings and structural features, control of indoor air pollution, safe handling of chemicals, and suitable precautions where the home serves as a workplace. In order to minimize psychological and social stress there should be suitable living space, family ties to the community, proper siting, access to safe play and recreation, minimal exposure to excessive noise, and as few personal hazards as possible. The neighbourhood and community should provide the necessary physical infrastructure, with security and emergency services, and access to educational, health and social services as well as to cultural and other amenities. It has to be recognized that the manner in which residents use housing can profoundly influence its health potential. Populations at special risk from housing hazards include women and children, inhabitants of inner-city slums, shanty towns and squatter settlements, displaced and mobile populations, and the aged, chronically ill and disabled.

Among the constraints facing health leaders charged with meeting basic needs for shelter are the following:

- **Inadequate information.** Regional and national housing statistics are often lacking or
incomplete. Moreover, the absence of broadly-applied housing standards limits the content and usefulness of statistics.

- **The size of the problem.** There are reputed to be 100 million homeless persons in the world but greater numbers live in dwellings that aggravate rather than protect against health risks. Housing improvement schemes have to compete for resources with other economic and social projects, including those aimed at providing better health services.

- Housing conditions are inextricably bound up with individual and communal poverty and its wide range of determinants, among them employment, income, level of development, distribution of wealth, educational level, land tenure, community and neighbourhood organization, cultural practices, and the cost of land and building materials.

- **The provision of shelter is an intersectoral problem.** The construction and use of housing impinges on virtually every sector of governmental and economic organization. Few countries are able to coordinate the governmental actors, much less the nongovernmental elements. National ministries of housing often have limited powers of control and coordination, because action is needed at all levels of governmental and social administration.

- **The provision of shelter is often an “ungovernable” enterprise.** Except in a few countries where urban housing is a state monopoly, the world’s housing stock derives from private initiative. People acquire land and plan, site and construct residences. In most industrialized countries, such activities are restricted by the enforcement of standards that may be backed by professional and craft norms. In many developing countries, however, fewer restrictions exist.

### Survey

Currently, the WHO programme on the environmental health aspects of rural and urban development and housing is a response to urbanization and the side-effects of economic development, and reflects continuing concern with the influence of conditions in dwellings on health.

With a view to developing a responsive strategy for the programme, a survey of national needs and capabilities was conducted (5). The frame of reference included the relationship between housing and health, the characteristics of the housing problem, and possible ways of solving it. The survey instrument comprised three pages that respectively covered:

- housing of the general population;
- housing of slum-dwellers, squatters, refugees and mobile populations;
- health aspects of socioeconomic development processes.

The questions in the first and second parts concerned health provisions in housing, key interventions, and activities and capabilities of national health authorities. The third part concerned health involvement in various development processes, and, again, activities and capabilities of ministries of health. Each page consisted of a matrix, with the topics

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appearing on one axis and the conditions and activities being listed on the other.

A total of 845 data items were included to permit detailed recording for regional office and country office use, and most reporters scored all the items; 133 of the items were selected for use in the global survey.

Scoring involved using a scale ranging from 0 to 3. For questions on populations the points represented quartiles. Thus 0 on the scale represented 0-25%, and so on. For questions pertaining to conditions or qualities, ordinal scales were used, e.g., 0 = lacking, 1 = minimal, 2 = partial, 3 = adequate or better.

Reporters were recruited by the six WHO Regional Offices, in most instances from WHO country staffs who were well informed and comparatively unbiased. In countries without such staffs, preference was given to relatively neutral parties, e.g., university staff; in a few countries the reporters were government personnel.

Reports were obtained on 70 countries (see box), providing a cross-section of WHO membership in terms of size, geography, and economic status. The unit of analysis was

| In the housing domain, most governments lack mechanisms to coordinate developmental and regulatory actions and to meet intersectoral needs. |

the country, WHO’s intention being to use the information in programming its technical cooperation with Member States, primarily country-by-country.

Findings

The survey data provided information on problems in countries, on the character and extent of national responses to them, and on the role and capabilities of national health authorities.

Problems

Particularly in developing countries, including some above the lowest income levels, large proportions of the population had inadequate shelter, with respect to structure, location, basic facilities, and space. In general, rural dwellers had less adequate housing than urban dwellers, although conditions in urban slums and squatter settlements narrowed the difference in some countries. However, the needs of rural residents were less likely to receive attention than were those of people in urban areas.

Of the 70 countries, only 23 had adequate housing for at least 75% of their populations; in 17 countries, less than half the urban population had adequate housing, and less than half the rural population of 28 countries was adequately housed. Conditions were not improving, or were even deteriorating, in at least 20 of 57 countries with inadequate housing stocks.

In eight of 44 countries for which pertinent data were reported, more than half the population consisted of disadvantaged groups (slum-dwellers, residents of shanty towns, refugees, migrants, nomads). The proportion was more than a quarter in 20 countries; only 12 countries, several of them industrialized, had less than 10% of their populations in disadvantaged settings. Moreover, the severity of housing problems was scored as “serious” or “grave” in two-thirds of the 154 scorings submitted on the disadvantaged groups.
Those health provisions directly linked to disease were less adequate than housing supply itself. For example, 75% of rural dwellers in 22 countries were deemed to have adequate housing but adequate health provisions were reported at this level in only eight countries; in 28 countries, less than half the rural dwellers had adequate housing, while the housing of less than half of rural dwellers had adequate health provisions in 42 countries.

Among health provisions, water supply was the most widely available, but was scored as “good” for urban areas in only 30 of the countries; scores were lower, especially for rural populations, for all other provisions, including the disposal of excreta and solid waste, facilities for food hygiene, surface water drainage, personal and domestic hygiene, and structural safeguards against thermal hazards and pests. People were protected against indoor air pollution in only a few countries, this being a significant factor in respiratory diseases in populations using biomass fuel, and little was done to protect people against excessive noise, even in affluent countries.

With some notable exceptions, housing conditions conformed to national patterns of wealth. The high-income countries (see box) had the best conditions, followed by the upper-middle-income countries. However, a number of low-income countries had better conditions than some of the lower-middle-income countries, suggesting that, while the poverty factor is undoubtedly powerful, constraints additional to economic ones influence the state of housing and its health provisions.

**Responses**

Few countries were responding strongly to housing inadequacies. “Partial” responses to urban needs were reported in about half the countries. Governments were doing less to improve housing, either directly or by the more useful course of providing supports, than to meet other social needs—and social

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**Countries surveyed**

**Geographical distribution by WHO Region**

<table>
<thead>
<tr>
<th>Region</th>
<th>Count</th>
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<tbody>
<tr>
<td>Africa</td>
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<tr>
<td>Americas</td>
<td>14</td>
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<tr>
<td>Eastern Mediterranean</td>
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<tr>
<td>Europe</td>
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<tr>
<td>South-East Asia</td>
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<tr>
<td>Western Pacific</td>
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</table>

**Distribution by population size**

<table>
<thead>
<tr>
<th>Population Size</th>
<th>Count</th>
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<tbody>
<tr>
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<tr>
<td>10–40 million</td>
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<tr>
<td>1–10 million</td>
<td>29</td>
</tr>
<tr>
<td>Less than 1 million</td>
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</table>

**Economic status (World Bank classification)**

<table>
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<th>Economic Status</th>
<th>Count</th>
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<tbody>
<tr>
<td>Low income</td>
<td>20</td>
</tr>
<tr>
<td>Lower-middle income</td>
<td>24</td>
</tr>
<tr>
<td>Upper-middle income</td>
<td>13</td>
</tr>
<tr>
<td>High-income industrialized</td>
<td>10</td>
</tr>
<tr>
<td>High-income oil-exporting</td>
<td>1</td>
</tr>
<tr>
<td>Non-market economy (Eastern Europe)</td>
<td>2</td>
</tr>
</tbody>
</table>

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*Afghanistan, Angola, Argentina, Australia, Austria, Bahamas, Bangladesh, Barbados, Bolivia, Botswana, Brazil, Burundi, Cape Verde, Chile, Costa Rica, Czechoslovakia, Denmark, Dominican Republic, Ecuador, El Salvador, Fiji, Finland, France, Federal Republic of Germany, Guatemala, Haiti, Hungary, Iceland, India, Indonesia, Iraq, Kenya, Republic of Korea, Lao People’s Democratic Republic, Lebanon, Lesotho, Malawi, Malaysia, Malta, Nepal, New Zealand, Nigeria, Norway, Pakistan, Union of Myanmar (Burma), Papua New Guinea, Paraguay, Peru, Philippines, Portugal, Saudi Arabia, Sierra Leone, Singapore, Solomon Islands, Somalia, Sri Lanka, Swaziland, Sweden, United Republic of Tanzania, Thailand, Tonga, Turkey, Uganda, Vanuatu, Viet Nam, Western Samoa, Yemen Arab Republic, Democratic Yemen, Zambia, Zimbabwe.*
development as a whole lagged behind economic development.

Action by nongovernmental entities was reported from few countries. Community organization was scored as "weak" or "absent" in two-thirds of the countries and as "adequate" in about a tenth, most of the latter being developed. More community organization was reported in rural than in urban areas. It was weakest among populations in disadvantaged housing, and the relatively rare remedial programmes for such groups were most often aimed at urban slum-dwellers and almost never at migrant and nomadic populations.

Effective mechanisms for intersectoral cooperative action—essential in responding to needs in housing and parallel social development—were reported in eight countries; moderately vigorous, presumably developing, entities were reported in 16 others. Intersectoral activity was weak or absent in 41 countries. Such activity appeared to be directed most often to urban problems rather than to those of rural populations and disadvantaged groups.

Health interests were represented in all but eight of 65 intersectoral bodies related to housing and social development; the activity of health representatives was high in seven countries, moderate in 22 and minimal in 28. The health awareness of development leaders was high in eight countries and moderate in 33, while development leaders in 24 countries had little or no health awareness in relation to their responsibilities. Awareness of the health aspects of socioeconomic development was somewhat higher in ministries of health, although it was scored as "low" or "absent" for health authorities in 20 countries.

**Health authority participation**

Regarding the health aspects of housing for the population in general, 34 of the 70 national health authorities were actively involved and 36 had minimal or no involvement; in seven countries, health authorities played the leading role. There was significantly less involvement with disadvantaged groups.

Health standards for urban housing were fully established in 11 countries, most of them industrialized, and partly established in 35 others; 23 countries had few or no standards. Fewer countries had standards for rural housing, 37 being in the "few" or "none" categories. All but three countries had health authority participation in social and economic development activities; the quality of participation in social development work was scored "good" in 10 countries, whereas only three countries received this score in respect of economic development work.

The influence of the health authorities in governmental socioeconomic development activities was rated "high" in four countries, "moderate" in 27, and "low" or "none" in 33. Only 21 national health authorities had "high" or "moderate" influence in nongovernmental development activities.
Only five and three ministries of health had staffing adequate to handle the health aspects of urban and rural housing respectively; 50 countries’ ministries had minimal or no staffing for this function.

With regard to environmental health, 12 countries had adequate staffing in food hygiene, ten in sanitary education, nine in the disposal of rural excreta, and seven in water supply and surface water drainage; four or fewer countries had adequate staffing in protection against indoor air pollution, thermal hazards, and excessive noise. Between 36 and 51 countries had minimal or no staffing in the several environmental health fields. Comparable scores were recorded for ministry of health staffing for the health aspects of socioeconomic development other than housing.

Only eight ministries of health gave adequate status to units dealing with the health aspects of housing; 41 countries accorded low status or none to such units. Information resources related to the health aspects of urban and rural housing were adequate in 17 and ten countries, respectively; in only three to seven countries were information resources on the conditions of disadvantaged groups scored as adequate. About 42 countries had little or no information on rural and disadvantaged populations, and 21 had none on urban housing.

Only eight countries had adequately linked primary health care with the health aspects of housing for the general population; fewer still had done so with the housing of disadvantaged groups. Partial linkages, mainly in water supply and sanitation, were reported for 24 countries; in 38 countries there were minimal or no linkages of this kind. Comparable scores were registered for linkage between primary health care and other aspects of socioeconomic development.

**What can be done**

Governments and health authorities should act in accordance with the following principles.

- **Health advocacy.** Health authorities and related bodies should strive to make health considerations integral to public and private decision-making about housing. This requires advocacy at local, regional and national levels, using diverse channels and media so as to gain the support of other governmental and nongovernmental bodies.

- **Influencing economic and social policies.** Housing improvements often depend on policies for which the primary responsibility lies outside the health sector, including those on socioeconomic development, basic infrastructure, land tenure, local government powers, rights of landlords and tenants, family planning, and land use regulation. Health interests should be represented in the policy-making process and health values incorporated into policies.

- **Participating in and managing processes of planning, policy implementation and service provision.** Health values may be advanced when health authorities engage in the planning and management of socioeconomic development, urban and land use planning, the development and enforcement of housing legislation and standards, the provision of community services, and monitoring and surveillance. It is vital to have clear, realistic standards that are epidemiologically sound and affordable by the populations concerned.

- **Public and professional education.** Decisions about housing, and behaviour patterns in
its use, can be greatly influenced through the education of householders, architects, builders, manufacturers and suppliers of building materials, health workers, engineers, technicians, and local and national policy leaders and development managers.

- **Fostering community organization and participation.** In the promotion of self-help, help for neighbours, and communal cooperation, education should lead to group action for the improvement of dwellings and settlements. The health sector may take the lead in countries where primary health care policies are already based on increased community participation and responsibilities.

If health ministries are to engage in such actions to promote the health aspects of housing, they require explicit policies and priorities, organized and timely information, linkage to sources of expertise, adequate numbers of competent personnel, and mechanisms of coordination with mainstream health care services.

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The survey data confirm and reinforce other information indicating that, globally, housing provision is not improving. Indeed, in some of the most populous developing countries the situation is becoming worse. Furthermore, many millions of families with roofs over their heads lack essential provision for health protection and the promotion of well-being. Rural and “underclass” urban populations are generally the worst off. As a rule the level of housing provision reflects national economic status.

The improvement of housing is given low priority in most national development policies, lagging substantially behind other social considerations and far behind economic growth. In the housing domain, most governments lack mechanisms at either local or national level to coordinate developmental and regulatory actions and to meet intersectoral needs; matters may be even worse in the nongovernmental sphere. In few places can it be assumed that a conscious effort is being made to meet the health requirements of adequate housing.

Except in a few countries, the official policies and programmes intended to improve the situation are inadequate. Advocacy and educational functions are executed weakly, if at all; and only rarely is there integration of primary health care with activities aimed at upgrading domestic conditions. The provision of staff to deal with the health aspects of housing is pitifully meagre in most countries. Those health ministries that have units concerned with such matters generally accord them low status and priority in comparison with medical programme units. This neglect constitutes a major shortfall in public health leadership. Epidemiologically, it means ignoring the relationships between housing, host resistance, protection against the biological, chemical and physical agents of disease, and medical interventions, both preventive and curative. Socially, such neglect weakens those elements of primary care that link health with living conditions, community participation, and socioeconomic development.

The health sector cannot, by itself, solve the problem of inadequate housing. But its mission requires it to serve as advocate, norm-setter, teacher, and agent for development actions that will help to meet people’s needs. Such leadership is not provided by most health administrations, mainly because of the extent to which they concentrate on the provision and regulation of medical care. This is a self-imposed constraint that weakens their capacity to
lead. If they do not revise their priorities and join in broad social programmes that address the essential requirements for health, much of what they customarily do is likely to prove wasteful and futile.

The objectives of the health-for-all strategy could be powerfully served if health values were integrated into the efforts of families and communities to improve the conditions and use of their dwellings. What is more, the process of supporting such endeavours would tap a deep source of personal motivation for development: people care about their homes.

References


Migrants help to swell cities

Migration is a more important factor in urban and metropolitan growth than has been acknowledged in recent years. When the natural increase among migrants is added to net migration, it accounts for a very substantial proportion of total metropolitan growth. As about two-thirds of migrants are in the age group 15–29 years, they create a demand for employment opportunities that few cities are able to meet. However, although migration is usually considered to impose social costs, this is not always so and, in many cases, it may benefit cities economically.