Environmental Health

Health and culture in urban planning
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Rapid change, driven mainly by business and technology, has transformed our understanding of health and living conditions in recent decades. Experiments in urban development in Japan are bringing together technology, quality of life, culture and business to satisfy the needs of human health and well-being.

Life in a megalopolis is quite special, with many advantages as well as serious problems. This is seen particularly clearly in a city such as New York with its vast variety of economic, cultural and social opportunities which attract people in spite of all the well-founded worries about security, anonymity, pollution, noise, congestion and other problems. The number of cities with over 7 million inhabitants is steadily growing in Asia, and now includes Bangkok, Beijing, Hong Kong, Jakarta, Manila, Osaka, Seoul, Shanghai, Tianjin and Tokyo.

To counteract the trend towards unmanageable urban problems, the city has to be developed to meet not only immediate economic needs but deeper human needs as well. For example, Florence is seen as a good place to visit and live in not only because it provides food and shelter but because of its beauty, the way it harmonizes with its natural setting and its special role as an art museum. In Japan, attempts have been made in cities such as Kobe, Kyoto and Miyakonojo to show how urban design can likewise make good use of prevailing local culture and characteristics. The key strategy for achieving this has been to place the inhabitants of the town concerned at the centre of discussions on its development.

Health and the city

Our changing view of the city is closely connected to our changing view of health, which in WHO's definition is “not merely the absence of disease or infirmity” but “a state of complete physical, mental and social well-being”. In recent decades it has become clearer that success in increasing life expectancy has to be accompanied by an acceptable quality of life if health in any meaningful sense is to be achieved. At the same time, changing disease patterns have made lifestyle an important determinant of physical health. These trends led to the Ottawa Charter for Health Promotion which was adopted in 1986, and the attempt to implement it through the Healthy Cities projects in Europe.

The aim in this approach to urban development is to build up a culture which is conducive to health in the fullest sense of the term. Modern society has been shaped to a large
extent by a business culture, in which the aim has been to maximize profits by achieving ever higher levels of efficiency and rationality in mass production. It is commonly recognized, however, that this objective, however successfully it is pursued, does not lead to increased well-being unless it is accompanied by other aims such as the best possible quality of life for the society as a whole.

The City Project organized by the Ministry of Health and Welfare in Japan reflects this trend towards health promotion through urban development. It is seen as particularly relevant to this country in that average life expectancy here is the longest in the world but major problems of human well-being remain conspicuously unsolved.

The process starts with a commitment to making the environment one which favours the improvement of health in all its dimensions. This must involve the general public as much as all the various relevant authorities and organizations. The practical measures to be taken can be summarized as follows.

- **Preparation.** The project is implemented through the municipal authorities, with whom the initial planning is done.

- **Establishing local identities.** Cultural and environmental characteristics are defined as part of the framework for health promotion.

- **Maximizing effectiveness of existing resources.** Measures for disease prevention are taken and evaluated. Therapeutic information systems are established. Data on quality of life in relation to health care are gathered and analysed. Waste disposal and recycling systems are improved. Environments which meet the special needs of groups such as the elderly, children and the handicapped are developed.

- **Economic base.** Economic aspects of preventing disease and restoring, maintaining and improving health are analysed.

- **Public awareness.** Volunteer activities are organized through information and training centres on health promotion.

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- **Private sector participation.** Business and non-governmental cooperation is enlisted.

- **Scientific research.** With national and local government support, research on urban health and culture is carried out using experimental models and focusing urban design on environmental health.

- **International cooperation.** A healthy community project involving several cities in the region is set up; international symposia are organized for the exchange of information and ideas on this subject.

**Health promotion and economics**

During this century, spectacular progress in medical science and technology has been accompanied by growing concerns about ethics, well-being and human dignity. It has also led to a number of practical difficulties such as the increasing proportion of older people in the population and apparently unlimited escalation in the cost of health care. The aim of an urban health and culture project is to bring together all such factors into one coherent development plan with a firm economic base.

The spectrum of activities and facilities needed for disease control is represented in
Fig. 1. The first stage, and the one in most need of attention at this point, involves avoid-ing or reducing common risk factors. As many of the risk factors are the same for various non-infectious diseases, needs at this stage can be met by a common set of activities as shown in WHO’s Inter-Health initiative.

Fig. 2 illustrates the kinds of diseases and activity areas that are usually involved in such an initiative. On the basis of epidemiological studies, the project aims at influencing lifestyles to make them less conducive to the diseases concerned. This involves health education, defining and providing the necessary infrastructure, finding economic support for health resources, and ensuring equitable access to these resources.

Various economic studies are needed to ensure the viability of health promotion efforts. They mainly need to show all the direct and indirect costs involved, how they are met, and how they relate to the benefits gained and the effectiveness of the preventive and curative measures provided. The necessary financial and administrative support must be organized for academic studies covering economic and public health aspects of these activities.

The need for research

Epidemiological studies are essential for an effective inter-health project. Of particular importance in recent years has been the development of long-term cohort studies using locally available data on the population. In addition to the standard morbidity and mortality statistics, there is an increasing need for information on the incidence and risk factors for such diseases as cancer, heart disease, diabetes, rheumatoid arthritis, chronic bronchitis, psychoneurosis and gout. Findings from ongoing studies with practical implications should be reported annually, rather than being withheld in the customary academic fashion until the final results are available. In addition, a standardized methodology for producing and evaluating results is needed, so that information from different places can be compared.

Scientific research on health promotion needs support in the form of staff and financing from national and local government, academic institutions and medical organizations. In addition it needs methodologies for gathering and interpreting information in such widely varied areas as the environment, lifestyles, rehabilitation and cultural anthropology. The facilities needed for this research should
also be borne in mind. They should include an intersectoral health information centre and an anthropological science museum. Specific goals should be set to guide such research activities, so that they can be evaluated and adjusted accordingly.

Three examples: Kyoto, Kobe and Miyakonojo

In addition to being surrounded by natural beauty which reflects the changing seasons, Kyoto is a major centre for a wide variety of industries. Through discussions with the inhabitants and the business community, the city government formulated objectives based on individual well-being, good community relations and a well preserved natural environment. In this context a major effort has been made to restore and maintain the old part of the city and the cultural traditions that go with it.

In Kobe, urban planning has been based for some time on the healthy cities concept. A number of innovative projects for the disabled and the elderly are in progress, involving home care, purpose-built rehabilitation centres and a health information service. Kobe Port Island was constructed in 1980, and serves both as a centre for academic and industrial research and as a health-oriented model housing project. There is also a waterfront development called Harbour Land which opened recently and serves as an information and social centre for young people. Kobe's identity as a national and global trendsetter in high technology is given depth by a number of general and specialized museums.

In Miyakonojo, which is in a relatively rural setting in southern Japan, efforts have been focused on community identity, lifelong education, organic farming, transport and communication, and health-related services. The latter include cultural activities and sport, as well as preventive and curative care. There are also plans to make Miyakonojo part of a large rural area devoted to health and to build a "wellness university" there, to train health personnel.

In conclusion, it may be said that the "health and culture" approach, though still in its experimental stage, is providing a much needed focus for urban development. It also provides a way of integrating concerns about technology, quality of life, culture and business into a coherent set of policies guided by the needs of human health and well-being. It will find expression quite differently in each city and each country, but through the sharing of information and ideas it can also make a major contribution to mutual understanding in our common pursuit of health for all.