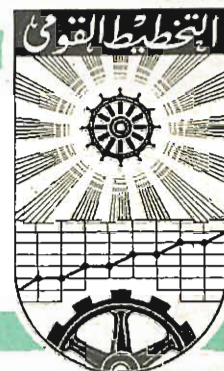


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HUMAN SETTLEMENTS AND HEALTH

A Comprehensive Paper  
of  
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## 1. INTRODUCTION

### 1.1 Human settlements

The complexity of the topic health and human settlements is such that in order to consider the various interactions and implications involved it is necessary to construct a central theme around which the various different approaches to solving many of the related problems can be brought together in an integrated, comprehensive way.

One of the more focal issues around which health problems have been observed to revolve is the imbalance that exists or which often develops, between population and the organizational, technological, human and monetary resources that are involved in improving the quality of life of that population. It is through these two fundamental forces that help shape the nature of human settlements that this paper will consider the problem of health and habitat.

Throughout the world recent history has been characterised by an increasing disparity between population growth and the development and utilisation of the resources required to meet the different needs of those populations. Internal and externally oriented migration has been one of the more manifest results of such disparities while in turn, movement of large groups of people from one area to another has had inevitable health and social consequences.

Traditionally the rate of population growth in most societies has been slightly above replacement level. With declining mortality rates, however, this growth in population has accelerated. This has been particularly so in economically less prosperous countries where growth rates of 2½ to 3% have been observed. In more developed countries, on the other hand, population growth has been of a significantly lower order suggesting that an almost inverse relationship may exist between population and resource growth.

### 1.1.1 Migration

Migration has evolved as one of the alternative courses of action that man has used to meet this dilemma and improve his living conditions. In most such endeavours he has succeeded but in others migration has had a variety of negative implications for both the migrant and the human settlement to which he migrated. Where social and economic barriers have limited integration within host communities, squatter settlements and shanty towns have mushroomed. Decaying parts of cities have been given over to economically and socially depressed groups and slum settlements have often developed within the framework of existing communities. In large cities this has in turn been associated with further outward movement of upper and middle class groups to settle in suburban centres away from the congested and deteriorated city. Where they have tended to become economically and socially self-contained, their relationship to the city has become purely occupational.

Thus, in cases where population movement to other settlements is not associated with economic and social mobility,<sup>1</sup> existing settlements are liable to suffer while the benefits to the incoming migrant remain doubtful e.g., migration from villages to cities in developing countries.

Where population movement is associated with economic and social mobility, on the other hand, there can be mutual benefits for both the migrant and the settlement to which he moves.

### 1.1.2 Moving groups

Similar problems have been associated with what will here be termed "moving groups" (tourists, national and international seasonal workers, pilgrims, nomads, etc.).

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1) In economic terms mobility means the movement from less to more attractive jobs or employment.



Developments in mass transportation have not only accelerated the movement of many such groups but have also made temporary movement a possibility for larger proportions of the world population than ever before. Aside from the economic, social and political significance of this, the implications for health of such a phenomenon are broad.

#### 1.1.3 New settlements

Development of new settlement communities associated with the exploitation of resources also calls for consideration from health planners. Usually planned in advance they are of special interest because:

- (1) They represent a spearhead for the planning and design of the settlements of the future;
- (2) They provide the health sector with a unique opportunity for better planning and management of health delivery systems as an integral part of an overall development strategy.

#### 1.1.4 Displaced groups

Settlements for displaced persons and groups result from dramatic changes in the natural or socio-political environment; floods, famine and wars bring about acute needs and produce quite specific health problems. Over the long term, however, these needs and conditions may be less problematical than those that are experienced by settlements generated through the displacement of population groups for developmental purposes.

## 1.2 Health implications of human settlements

### 1.2.1 A typology of human settlements

Any discussion of the health implications of human settlements will be shaped by the way we view human settlements. The view that human settlements are simply a variety of population numbers living on various sizes of settlements inevitably leads to an over-simplified approach that perceives health problems of human settlements as essentially problems of density and crowding. Solution by those who follow this approach will be sought in the search for optimal numbers of people to services. Likewise the provision and location of health services will follow similar principles in order to maximize the utilization of services through the purely economic tools of staffing/population ratio and optimal location.

The above view completely ignores the essential role of human values both at individual and societal levels. The main emphasis is directed towards the perfection of physical aspects of human settlements based on the fallacious assumption that desired behavioural changes will certainly follow. It has been proven beyond doubt that such an approach is insufficient, and that a comprehensive view of human settlements which incorporates physical, social, cultural and political factors which influence human values and behaviour, is much more realistic in understanding and solving the problems of human settlements.

In a comprehensive approach, health implications of human settlements are viewed as reflections of the process of man's adaptation to the many elements that make up his physical and/or social environment. And since human settlements in this approach are viewed as variations of resource/population mixes, it is possible to conceptualize health



implications of human settlements as varying both between and within different types of settlement. In order to expand upon this approach and to examine the health implications and the role of health services in human settlements, a typology has been constructed.

This typology was developed on the basis of of a number of settlement criteria and given an analysis of the resettlement process. The desirability of a dynamic approach in looking at this problem is emphasized. It classifies human settlements into the following six main groups:

- (1) Settlements which result from rural-to-urban migration;
- (2) Traditional villages;
- (3) Existing cities (traditional)
- (4) Human settlements which result from government or private sector development efforts;
- (5) Settlements for moving groups;
- (6) Settlements for displaced persons and groups.

#### 1.2.2 The present health situation in human settlements

Little is known about the relationship between health status and the different physical and social characteristics of various types of human settlements throughout the world. Some case studies and analyses related to this subject are available but on the whole the data are not crossculturally comparable and it is difficult to establish general principles concerning the relationship of health status to physical and social environment.

The problems of environmental health - water supply, waste disposal, other qualities of housing, vector control, soil, air and water pollution, food hygiene, radiation control, occupational health are almost invariably associated

with specific types of human settlements. And, in turn, crowding, inadequate personal hygiene, poor housing, poor nutrition and lack of education are known to be associated with the high morbidity and infant mortality that occur in certain types of human settlements.

Because of their typically poor living conditions, low incomes, poor access to services and knowledge about health care facilities in the particular setting in which they find themselves, migrant communities too are often at high risk of communicable diseases, presenting a problem not only for the group itself but also the host society in which they are located. Problems of mental health have also been observed to be related to migrant groups, suggesting that the stresses involved in family disruption and cultural dislocation may go on to generate specific mental health conditions.

Large numbers of people in small spaces predispose to epidemics of infectious disease. Psychosomatic and social problems such as juvenile delinquency and drug taking have similarly been observed in some such settings. This however is not necessarily universal. Some cultures have solved such problems more effectively than others while in yet other cases problems of this nature may simply not have arisen.

Rapidly changing social conditions have been the cause of problems in certain parts of the world. Influx of foreign migrants with different concepts of social values, technological developments such as television which alter leisure patterns, or the increased use of motorized transport, which, while increasing mobility, may tend to break up family groups, are all examples of the way in which change may affect health.

Economic factors too have an important effect on health. Poverty leads to malnutrition, communicable disease, and high

rates of infant, child and general mortality. It may also predispose to fatigue, frustration and distress. Affluence, on the other hand, appears to be more closely associated with chronic diseases such as heart problems, alcoholism, depression and suicide. Again, the effects of both poverty and affluence can be largely mitigated by cultural patterns, which provide both challenge and hope to the populace.

Social isolation, resulting from the loss of family and friends, can be an important factor in the development of many depressive conditions while making groups susceptible to certain communicable diseases. The epidemics that spread among eskimo populations when they were first exposed to visitors from the outside world are typical of this.

It is important too, to note that social institutions are changing rapidly in concert with population trends. The family, at one time largely responsible for taking care of both the physically as well as the mentally ill, has tended to be broken up by industrialization and urbanization, leaving a gap in health care which is not being adequately replaced by alternative institutions.

Culture inevitably plays an important role in health, determining the way in which people perceive their environment and their quality of life. It is characterized by customs and beliefs which in turn influence sanitary habits, personal hygiene, diet, the preparation of food, type of housing, and need for privacy, etc. The potential role of the community itself, in taking care of the chronically sick and the aged is enormous. Unfortunately, rapid social changes lead to changes in cultural and traditional approaches that were once used to deal with problems. These traditional solutions are disappearing and are not being replaced by new ones.



### 1.3 The role of health services in human settlements

#### 1.3.1 Comprehensive approach

Based on the view that health implications of human settlements are reflections of the process of adaptation and adjustment to the physical and social environment, health services in human settlements should be designed to enable man to achieve a better level of adaptation and adjustment. This requires a more comprehensive approach to health than the limited disease-oriented role which has prevailed previously. A new orientation and fundamental changes in attitudes of health workers, their training and the planning and the planning and delivery of health services are thus necessary.

#### 1.3.2 Reducing resource/population imbalances

Following the basic hypothesis that resource/population imbalances are the fundamental cause of the present deterioration in quality of life and health status in human settlements, any overall approach to improve these conditions should first aim at removing such disequilibrium. Health action can only be meaningful if it becomes an integral part of an overall strategy, policy and plan to deal with the problems of human settlements. This requires an understanding of how health considerations can be aligned with the values of other sectors associated with development.

In this report an attempt is made to demonstrate the role of health in improving resource population imbalances through resource and population activities. Three basic resource activities are mentioned, i.e.:

- (1) Improving utilization and maintenance of available resources;
- (2) Exploiting unutilized potential resources; and
- (3) Seeking new resources.

On the population side, health action to improve imbalances is delineated in three areas:

- (1) manpower development;
- (2) reducing disparities in living standards;
- (3) popular participation.

### 1.3.3 Justification of health services

Lack of co-ordination and collaboration between sectors involved in development leads to the health sector being left with fewer resources than it needs. Characteristically the attitudes of governments towards health issues have centred on the allocation of resources required to deal with problems on a residual basis. The use of cost-benefit approaches may help justify some requests, but the application of rigorous economic analysis to many health activities is extremely difficult if even desirable. This difficulty contributes to the tendency to assign low priorities to the unmeasurable impacts of health in spite of their great significance for development. The argument of the productive role of health, for example, does not hold in many settlement situations where labour surplus, unemployment and underemployment obtain. On the other hand the argument for the educative role of health, which is extremely important in precisely these same settlement situations, is almost always ignored because it is not as easily subject to quantification and is hence accorded a lower priority.

### 1.3.4 Planning considerations

In considering these approaches, planners of health delivery services should take into account the fundamental differences that exist between physical, social, economic, and cultural aspects of various human settlements and the extent to which these differences influence the nature of health needs and the services that can meet them. All too often they have been ignored, and health service models have



been introduced irrespective of their pertinence to the needs of specific human settlements.

The utilization of health services is basically a function of their physical, social and economic accessibility. In many cases, however, social acceptability is the most important factor. Selection, training and assignment of health workers is thus crucial to successful utilization.

Contemporary health technology is such that in the case of many health problems people from the community can be trained to meet the level of competence required to perform most of the tasks. Empirical studies have consistently verified the fact that health workers are viewed as social change agents. Successful health workers dealing directly with the public should be of the same origin and background as their clients on all variables except technical competence in order to achieve acceptance among their clients.

Health services through community development is the approach that is singled out in this report as an advantageous means for integrating social action programmes.

The following features should be considered fundamental to health interventions in human settlements.

- (1) environmental factors of a physical nature such as housing, water supply, sewage and solid waste disposal, pollution, occupational hazards, lack of recreational space, crowding, population density, location and climate
- (2) environmental factors of a social nature such as disruption of family, isolation, culture conflict, attitude of host or receiving settlement, socio-economic level of receiving settlement and of new settlers
- (3) health delivery system factors such as efficiency, effectiveness, availability, accessibility and acceptability.