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ESTIMATION OF NEEDS AND DEMANDS FOR HEALTH SERVICES AND FORMULATION OF THE HEALTH PLAN

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I. HEALTH AND SOCIO-ECONOMIC DEVELOPMENT:

Good health is one of an individual's most highly prized possessions. It is a deep and intimate concern. It stands first and foremost as something to be preserved in its own right. Regardless of variations in cultural expression, expression, human society gives credence to this view by the various codes which protect the individuals right to life.

Illness is perceived as a threat to that right. Hence society has developed techniques for dealing with illness. Whether those techniques be exercised by the M.D., the Shaman, the priest, etc. they all have the aim of restoring the sick person to health and implicitly of restoring him to his community as an active member. It is with this latter aspect that health planning is properly concerned. The restoration to a state of "health" of the individual is not the domain of the health planner. Governments are concerned rather with all that goes into making it possible for the individual to have access to the health technology so that individuals will be maintained as active functioning members of their communities. Hence while the health authorities, by the very fact of their functions, have committed themselves to the view that health is a right, they also recognize the inherent paradox that the expression of one man's right to health is often at the expense of that same right of other men. Health authorities view health planning as an instrument which the government can apply to relieve this inherent inequity as much as possible in the light of overall national objectives. "As much as possible" for the simple reason that the health authorities must think in terms of the community and this involves making a decision about which segments of the population are to

get what quantity and quality of the available health services. Such decisions often imply a judgement that health, while it is an end in itself at the level of the individual is also a means to the end of development when considered at the level of the community.

Also, it is worthwhile considering the obverse of health, i.e. illness. First of all the costs of ill health are many, varied and great. Entirely aside from the personal misery and discomfort suffered by the individual and his family, the loss of time from work and decrease in productivity are very important factors in the cost of ill health. Not only does worker's illness cut down the family income, but a sizeable part of productive capacity is lostto society given certain assumptions about the labour supply. To the degree that poor health can be eliminated and the costs of sickness spread by public programmes and policies through insurance techniques, then to that extent the individual's economic burden due to ill health can be relieved.

Great gains have been made in recent decades by the medical profession. Diseases which were fatal and which attacked in epidemic form are now on the wane in many countries. The span of life and consequently, the span of productive life in most countries has been lengthened and infant mortality has been greatly reduced in the industrialized countries. A great deal remains to be done with respect to endemic and epidemic disease, infant mortality and public health in the developing countries.

There is no doubt that the world community at large possesses the resources with which to provide a reasonable level of medical care for all but there is as yet no way whereby these resources are made available to everyone. It is hoped that a consideration of the consequences of

ill health as they affect development will lead to a better integration of health with socio-economic development in general. Sickness is, in fact, similar to unemployment and industrial injury in its economic consequences. In an economic sense, sickness and injury are even more serious than unemployment, since they add the burden of medical costs to the regular expenses of maintenance. Unfortunately, however, our information and knowledge about the extent of sickness and its concomitant impact on economic status in developing countries is extremely sketchy. In spite of this, it is useful to consider some points about the value of health to the individual and to the community.

Investment in Health

Expenditure on health services could be considered as an investment because it adds to human capital, although national accounts classify expenditure into current and investment and prefer to use the term development expenditure as a compromise. In the introduction above the author alluded to the economic effects of ill health and to the fact that so many health hazards for which a technology is known remain to be controlled in the developing countries. One of the great problems in developing countries with respect to investment in health is not so much that there is not enough investment - although this is often the case - but rather that even what investment there is remains unproductive because all most investment in developing countries in the feeding and raising of a new generation for productive work and a great deal of this is unproductive simply because of the high death and disability rates.[1] With these facts before us it is clear that health activities can be viewed as wealth creating activities (assuming

that family planning is an integral part) in that they free the developing countries from the fatal, disabling and debilitating diseases that rob the third world of productive potential.

The wealth creating or investment aspect of health activities in the third world is but one aspect of healths' instrumentality in achieving development. There is evidence that attitudinal changes associated with the availability and accessability of modern health technology influence behaviour patterns conductive to social changes necessary for economic development and modernization.

Taylor has pointed out that the increase in life expectancy due to health activities carries in its wake a whole new orientation toward time and toward investment[2]. Throrough health education introduces empirical cause and effect explanations of phenomena previously misunderstood. Since health education reaches people directly and intimately, the relationship between disease and poor sanitation and other environmental factors, when explained, lay the foundation of the empirical approach to causation which can then be reinforced in the industrial and agricultural enterprises of modernity.

It is possible to conclude then that health contributes to socio-economic development by contributing:

1. to the inculcation of attitudes amenable to economic development and modernization;
2. to the productivity of the labour force.
3. increase in quality or stock of human capital.

The Need for Health Planning :

Taking national socio-economic development planning as a given the next step is then to discuss the place of planning for health within the context of development planning.

What we call national development planning has come about in recent years as a result of a fairly wide-spread conviction that government should be the prime mover in producing economic development and modernization. Central planning, which is but one approach to national development planning, has emerged in developing countries as the favoured approach. This has been due to a whole host of reasons among which are: the desire for social reform along with development; wide-spread and serious price system imperfections; the inability of the market mechanism to cope with the large structural changes over long periods which is essential for development; demands for a redistribution of income, diversification of the economy and freedom from foreign domination, etc. as well as the provision of sufficient social goods and services to meet the various needs of the growing population. Another argument which has claimed a considerable number of adherents throughout the world is that the challenges to development are more wide-spread and much more serious than they were for western countries in their pre-industrial period and hence the scope for the individual will be far from being sufficient to realize the required structural changes in a developing economy.

For various reasons, some of which have been alluded to above, we find that national socio-economic planning is viewed as the instrument by which a government seeks to accelerate the rythme of social

changes and the rate of economic growth in its country in order to raise the standard of living.

Aside from the social welfare issues involved, successful economic and social planning depends on the ability of people to realise their individual capacities which cannot be fully utilized as long as the present major barriers of disease and inadequate health and sanitation facilities continue to exist. Among the more important categories of activities that improve human capabilities[3] are health services. Health activities have both quantity and quality implications. All too frequently, however, health activities have been funded by government, if at all, on a residual basis or left almost entirely within the domain of the private sector. In either case, services then tended to be provided on the basis of the well known principle of non-planning i.e. "he who shouts the loudest gets the most", and also on the basis of "he who can pay the most gets the best", irrespective of need. This is not to deny the contributions of the sincere well-intentioned individuals and institutions involved in the provision of health care in so many countries. Rather the intent is to point out that the non-planned "everyone does his own thing" approach to health care has led to great inequities at the least and has in many cases resulted in an effective denial of the right to health care to the poor, the disabled and the powerless.

While planning is not a palliative for all problems encountered in the health system it is nevertheless a means of overcoming certain aspects of arbitrariness which result from unplanned situations. After all, if a country does not make choices through health plans, the choices will be determined anyway but very haphazardly

either by ability to pay, geographic location, by publicity given to a particular case or class or health hazard, or to a new technique, e.g., heart transplanting, and the like[4]. Planning at least has the advantage over non-planning in that it provides the decision make with a rational method for allocation of health resources to achieve specific health objectives i.e. provides a mechanism for

1. rationing the country's existing health resources;
2. detailing a course of long range action to increase the supply of health resources which require long years to develop;
3. implementing methods whereby the productivity of existing health resources can be increased.

Problems of Health Planning

The health planning process involves four fundamental stages:

1. the choice of goals, objectives and targets;
2. the assessment of resources (human, physical and financial);
3. the assessment of possible outcomes;
4. the assessment of possible side effects.

Problems encountered in health planning will relate to one of these four major stages. In addition, most countries attempting health planning find that they have certain broad areas of deficiencies which must be taken into consideration. These deficiencies have been dealt with extensively by others[5] hence the author will only touch upon the most critical. They are:

1. Lack of Resources - which has contributed to badly planned facilities, lack of research and development, poor utilization of manpower, and inefficient organization.

2. Isolated Attempts at Research and Development - Research has been done mostly at big university hospitals but the lack of a system for getting the results to the people quickly halts the advance of health technology.

3. Specialized and Skilled Manpower hardly ever seen as an investment - Lack of resources contributed to the problem of inefficient utilization of manpower and vested interests of the medical profession and long established paramedical professions such as nursing led to blocking of entry into professions as well as to blocking of attempts at the logical delineation of tasks.

4. Haphazard Organization - Developing countries suffer greatly from the dubious "legacy" of various health care delivery systems imposed under the colonial era. The Cameroon, for example, one half of which was under French administration and the other under the British, faced a tremendous organizational problem with health services at independence. Organizational innovations in the health sector are often met by resistance from the medical profession.

5. Lack of Public Participation - Modern scientific medicine has, until very recently, been entirely devoid of public participation. The doctor was viewed as the sole agent responsible for health care delivery and all the decisions that implied. Still in many countries the doctor is also the hospital administrator although he may not be trained for this

task. The patient, i.e. the client is forced to assume an entirely passive role once he submits himself to treatment. This is true to a large extent even in those countries where the patient assumes the burden of paying either personally or through his health insurance.

In addition to what might be called the five macro level problems which face the health planner, there are a multitude of problems involved in the planning process from the inadequacy of the data base to the complex decision as to what approach the planner will take to health planning, i.e., which of the following statements will he choose as the basis of his plan :

1. one person's life is as important as any other; versus
2. one person's health is as important as any other; versus
3. the life of certain people is more important to the community than the life of others[6]; versus
4. the health of certain people is more important to the community than the health of others.

The implications of any of the four choices are very far reaching. This choice is, in fact, the single fundamental choice the planner makes either implicity or explicitly. For such a choice determines the planning goals, objectives and targets. When the planner elects options one or three he will have to minimize the number of deaths. If he chooses option three he will make a judgement concerning which segments of the population should be targeted for the service components necessary to minimize the number of deaths and his allocation patterns will be drawn up accordingly.

Options two and four imply the use of techniques to maximize health. This is more difficult since it means that the planner must not only consider the number of

deaths but also the amount and extent of disability and debility if he is to maximize health. A choice of option four means that the planner has to decide which segments of the population would be targeted for maximization of health. While to date no technique has been developed for maximizing health in the sense defined above, the CENDES methodology has been used for planning based on minimizing deaths.

Very few attempts have been made to develop a linear model for minimization of deaths on the macro level. Recently, Correa and Hassouna published a model entitled: Planning for Health of Infants and Children in Egypt (Nov. 1972). It is a macro linear model for optimal allocation of health resources to minimize infant mortality in Egypt from the three main causes of death in the age 0-4 gastroenteritis, bronchitis and measles.

Once these fundamental decisions have been made, the planner then begins the first stage of the process of planning, i.e. delineation of the goals, objectives and targets of the health plan. It is with the second stage of the planning process that the author is most concerned in this paper, i.e. assessment of resources. More particularly we are concerned with the question of estimating the needs and demands for health services which in reality comes to the estimation of the needs and damands for resources. It is to this question that we shall now turn.