

## Equality and Quality

### Remarks in the Utility of Simplified Health Services

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"1. Better health is desirable, 2. the knowledge exists to improve health, 3. therefore health should be improved"<sup>1</sup>. This simple fundamental logic of health care seems on first observation to be clearly justified. In accordance with this statement, every doctor must prescribe the therapy for each individual case which he judges to be appropriate - may it be a dose of aspirin or the application of an artificial kidney. Technical advances have continually provided him with better means of diagnosis and therapy which he must use in the interest of each of his patients. Only in the realm of strictly private medicine is there a clear limitation on the application of this logic and medical knowledge the patient's ability to pay. This logic seems limitless within such systems in which national insurance schemes evolved because of the particular economic quality of health<sup>2</sup>. When expenses are borne by insurance agencies compensation, the individual interest of the patient and the fundamental logic of the physician coincide. With regard to the individual case, it is almost impossible to set a definite limit for the extent of medical ethics. Such a delineation would first be found when the explosively rising costs of health care could no longer be met by society and a social consensus had to be worked out. Where Western standards, private medicine and affluent social conditions coexist, doctors cannot diverge from this fundamental logic. For them there is no alternative: good modern medicine is of course expensive, but this cannot be a decisive factor in the individual doctor's treatment of a patient. He is committed to the individual patient, who on the basis of his purse or the principle of subsidy has a right to the best possible treatment.

These remarks presuppose the regulation of health care mainly by the patient's demand and the doctor's ethics. And demand, with an exclusively private economic system as model, is based on information regarding costs and prospects of success. There will be less demand from the lower income group whether or not there be greater need. Empirical studies also verify this for the situation of health care in West Germany<sup>3</sup>. It becomes most evident on the international front: the demand for medical services falls in conjunction with a decreasing Gross National Product, whereas the need rises as evidenced by estimation of experts or epidemiological findings<sup>4</sup>. However, the patients requiring attention demand optimal curative treatment. This is the orientation point for the training and equipment of doctors in industrialized countries as well as in wealthy centres of developing nations, in which the

living standard is basically the same. Fundamental medical logic allows islands of medical progress to form in developing countries, necessarily implying the preservation of existing inequality in order to afford at least a segment of the population 'optimum' medical care. Herein lays the basic dilemma of fundamental medical ethics, the discrepancy between need and demand as of the apparently necessary parallelism between inadequate care and care in excess.

The duty of eradicating such discrepancies is often addressed to the public health sector. In spite of political declarations, however, this is in fact only seldom realized. Thus, for example, the cost of Ethiopia's teaching hospital is "almost equivalent to the total annual health budget of this country. It is estimated that the recurrent operating costs of the hospital will amount to one quarter of the annual health budget"<sup>5</sup>. Such examples are innumerable. The adoption and improvement of Western standards thus prevents all but a minimal segment of the population from receiving optimum health care.

This in fact means assigning varying values to different population groups as regards the relative importance of life and survival of particular groups in respect to others. The application of the fundamental and simple logic of medical ethics seems to contradict a principle of equality. It is an elitarian logic.

Elitarian, too, is the usual economic logic applied to the health sector. For a long time economists considered themselves bound to answer the question of the utility of expenditures for health. They tried to assess the economic value of a human life. The capital value of a man is usually adjudged according to the standard definition of Dublin and Lotka: "the present and discounted value of future earning power of a wage earner, reduced by the costs of birth, upbringing and maintenance during a working life and retirement"<sup>6</sup>. In the economic evaluation on investments for health, this capital value based on the current health status of the population is compared with the capital value expected as result of the improvement of the health status, the project or program having been implemented. Through a reduction of mortality the size of the labour force is increased, a reduction of morbidity brings increased working hours, and reduction of debility increased productive capacity on the job. If this concept is applied to developing countries it becomes clear that the life of a subsistence farmer, vendor, unemployed person or mother has no or very little economic value. Economically speaking, health services are worthwhile only for those who either have achieved a high salary or who contribute greatly to the Gross National Product.

The same logic repeats itself in the standard argument of many economists opposing health services: health programs lower the death rate thus contributing to population growth and still further - *ceteris paribus* as all of this equation - to a reduction of per capita income and thus to famine. In other words, health programs produce the problem that "one cause of death is replaced by another, the goal of economic development is as far or farther off than before"<sup>7</sup>. It is impossible to show here in detail which elements of this sequence are cause and which effect and how this depends on varying social and economic situations. However, in spite of - or perhaps especially because of - its simplicity, this chain of argumentation is of importance. Altogether, it seems to be not only economically unprofitable to invest in the health of the impoverished masses in developing countries, but also further to intensify the economic problems.

That is both correct and incorrect. It is correct that health programs for subsistence farmers,

housewives and small children contribute little to raising the Gross National Product. It is also true that with a constant Gross National Product a growing population rate reduces the per capita income. That is as obvious as it is simple and meaningless, for logically it would be equally correct to note that the per capita income could be increased by a decimation of the population, particularly the unemployed. But this proves the utter inadequacy of this logic. Future income or contribution to Gross National Product is no effective indicator of the value of an investment in the field of health. At this point I prefer not to unfold the whole repertoire of the fallacies and false conclusions tied in with the Gross National Product as main economic indicator. A few clear-sighted economists, in particular the President of the World Bank and some of his advisers, are demanding expressly the renunciation of the GNP-criterion, for this criterion implies the support of such investments which aid those who already have a lot<sup>8</sup>. Thus it would mean taking a step backwards in the historical development of the economic cognitive process if one were still to try justifying investments for health according to their contribution to future earnings or Gross National Product.

Please do not get the wrong idea. Health services must be justified economically; this is obvious and remains legitimate. The question here is how they are to be justified. Economic justification in consequence of the previous remarks does not mean justification on the sole basis of monetary gain. 'Economical' means how much do health services contribute to the need satisfaction of each and all? The classic economists already defined economics as the science concerned with need satisfaction. A few - still too few - economists have rediscovered this basic law which alone can serve as the starting point for an economic justification of health services.

I do not have to expound here that health is one of the major human needs, regardless of which concept of needs one applies: whether that of felt needs, expressed needs, comparative needs or normative needs, which have been a particular concern of the World Health Organization<sup>9</sup>. For this reason I will here gloss over this point pondered by so many economists.

I stated that health services must be economically justified, and thus arrive at the more limited definition of 'economic', the relationship between cost and effectiveness. If it is proved that basic health workers are firstly cheaper than doctors and secondly able to accomplish many diagnoses and activities at least in the same manner, then this is an important economic indication<sup>10</sup>. If we can ascertain that some measures of preventive medicine are twenty times more effective than curative measures, then this is a further important indication for a rationalized and low-cost health service<sup>11</sup>. And if it be indeed verified that a reorientation of national plans of production in respect to standards of consumption rather than to export or monetary returns can reduce morbidity to a great degree in developing countries, this would be still another indication for the development of a rationalized, low-cost health service. The aim of this service would be to eradicate the causes of disease without neglecting the curative side<sup>12</sup>. And these three examples show that it is possible to have a health service fulfilling more needs of more people with no increase in financial and technical expenditure. This attempt to legitimize health services on an economic basis demonstrates as well that it is senseless to provide the health sector with a large portion of the national budget as long as this health sector is actually an illness sector. That is, the sector is intended for reduction of disease, the result of underdevelopment in other components of living conditions: nutrition, housing, clothing, working conditions and the like.

Economical means: effectiveness with limited resources. Here we are confronted with the problem of optimization, which also implies the logic of medicine, for its aim is to provide optimum health care within the realm of existing possibilities. But what is 'optimum'? Who is to define the term? Can the individual doctor give this definition? Is he the sole authority for the definition of the particular optimum? Optimum health care means that the patient's health status is improved by certain activities within the existing limits. The kind of activities and the kind of actors are not a question of ethics but of success. Therefore optimum care does not necessarily mean that the most highly qualified personnel in the health service perform and control all activities. It also does not signify that the health sector alone is responsible for the improvement of the health status of the population. The common definition of "optimum" in the social sciences is: through the combination of certain factors of production (doctors are only one factor in the medical production process) and with reasonable costs, to achieve an adequate output level. Within the scope of economic knowledge it seemed for a long time that capital was the decisive factor in production - analogous to the doctors in the ideology of medical associations. Empirically, however, it became quite clear that capital did not account for even 50% of economic development.

Empirical studies indicated very clearly that: "improved health standards and greater numbers of physicians do not necessarily go together"<sup>13</sup>. Empirically speaking there is only a slight correlation between the indices of health status and the quantity of doctors. Dorozynski expresses his surprise at the doctor's monopoly in regard to the definition of 'optimum'<sup>14</sup> defended in practice by the medical associations. The classical definition of a monopoly is the exclusive supply of any commodity or service in a given market. For an empiricist, such a situation is astonishing, for the actual question is whether or not health conditions have been improved. In the first instance, the empiricist is not really concerned with the reasons for the improvement or by whom measures were taken.

Under these conditions of medical monopoly, it was for a long time difficult to obtain the assent of medical associations to the founding of simplified medicine. In the meantime the fronts seem to have been mollified, in particular due to empirical studies dealing with the efficiency of paramedical personnel. A study by Guzman demonstrated that such personnel carried out 99% of the diagnoses and therapy independently as accurately as the supervising physicians<sup>15</sup>. In addition, the positive experiences of some countries with elements or systems of simplified medicine have recently been published, notably by UNICEF and WHO<sup>16</sup>.

This is one blueprint for the establishment of simplified health services. The theoretical reasons for simplified health services are evident<sup>17</sup>. I shall just mention a few. In view of the relatively clear and simple clinical picture in most developing countries, basic health workers can often work successfully in diagnosis and therapy. The advantage of employing basic health workers is chiefly of a financial nature: a doctor costs ten times as much. Basic health workers, especially those recruited and trained locally, remain longer in the district, since they are not accepted in the cities anyhow and receive no scholarships for foreign study. The cultural gap between basic health worker and patient is small, the health worker often being multilingual. In contrast to a free class of doctors that in respect to wages demands the current rate on the world market and is guaranteed freedom to settle anywhere, the basic health worker offers definite advantages. Thus by doubling the financial expenditure, the coverage of the health system can be increased by almost ten times. This is indeed the salient point, "to improve health care without increasing health costs"<sup>18</sup>.

An important problem is that costs are easily measured, but efficiency and effectiveness only with difficulty. Examples do not prove much but can point to problems. I am choosing an example from Ethiopia<sup>19</sup>. A simplified, pyramidal health system has existed there since the 60's. How does it function today? Every health station employs only one dresser, the local term for basic personnel with a training period of one and in rare cases two years. Thus regular leave with substitutes, rotation of personnel for extension courses and a mobilizing of the dressers' activities is hardly possible. Individual means of transportation such as bicycles, motor scooters, mules or horses are scarce. Preventive measures outside the four walls of the health station are thus impeded; and the limits of the budget with no room for allowances make them almost impossible. The number of patients treated daily ranges from three to seven. This is only partially due to the public's lack of trust; much more serious is the problem of lack of materials such as medicine, devices for refrigeration and sterilization, down to the obligatory receipt pads. There is also a specific lack of supervision, control and advanced training. Of the four fields of activity, the dresser can serve - inadequately - in only one, that of the polyclinical services. Preventive measures in the community, mobile services and those connected with vertical programs cannot usually be performed. Sweden, which has lengthy experience in the Ethiopian health system, described conditions thus: "the health stations ... are in a 'mess' ... their work is insufficient and expensive ... in fact most pharmacies are better organized and give better service, at a lower cost than the health stations"<sup>20</sup>. Therefore, to speak of the effective labours of Ethiopian health stations would be to exaggerate. Indeed, many dressers do their best. But in view of the needs and their prescribed tasks this is not much. Here simplified medicine means primitive medicine.

One of the major aspects in the evaluation of fundamental health services is to be found in the preventive area, justified also from the economic point of view. The preventive measures prescribed for the institutions and personnel in simplified medicine should occupy a correspondingly significant part of the time budget. But are they being fulfilled? Can they be fulfilled? Here as well the Ethiopian example might point a few problems<sup>19</sup>. One of the most important is as always that of financing. Budget outlines for health stations and health centres are usually stereotypes issued by the central authority, disregarding local conditions and needs, and are simply carried over from previous years. Not only are such budgets inadequate, but usually fail to include items for the methodical realization of preventive measures. The Ethiopian budget for health stations makes minimal allowance for material expenditures, mainly for personnel in the ratio of 1 : 4, whereas 1 : 1 is often considered the reasonable rule of thumb. In case of fluctuations in budget expenditures, funds for materials are occasionally cancelled completely. In the budget the only items under material expenditure that can be considered part of preventive measures are per diem allowance and transport costs. If used to the fullest, the budget suffices for nine days of preventive efforts outside the narrow limits of the health station. The dressers' labours reflect this situation most clearly; they perform almost exclusively curative medicine on a miniature scale.

The final balance of this Ethiopian example is grim. It is an eminent paradox of basic health work as mentioned by Baker that although such importance is ascribed to it theoretically, so little is actually put into practice<sup>21</sup>. One could provide a list of additional paradoxes. But the most significant is this: doctors serve the wealthy urban population, basic health workers the poor country folk. Pyramidal systems as well with basic health workers at the base, better qualified personnel in the middle, and the best qualified on the top accomplish little change. The practice of private medicine of many physicians is indeed inseparable from this pyramidal system. Basic civic rights, free choice of job, the interplay of supply and demand

and medical ethics often consolidate a situation of structural imbalance: an expensive medicine of affluence subsidized by all coexists with cheap medicine for the impoverished. Simplified health services do not usually change this situation but sometimes petrify it.

Who benefits by this situation? Definitely many doctors who either remain in the cities anyhow or who to gain additional training abroad, which will enable them, if they return, to achieve a position at the top of the pyramidal system in addition to a profitable private practice. For a public health service, to which little importance is ascribed in the yearly budget debates of the ministries, a poor country can hardly pay the current wage for doctors on the world market. Thus a pyramidal system benefits the physicians. It benefits the state treasury as well. It is cheaper than a state financed system of doctors, and at the same time seems to conform to the political norm of covering the whole country with public health services. Besides, simplified health services have achieved worldwide popularity for bilateral and multilateral donors. Simplified health services therefore benefit impecunious state treasuries and the doctors. Do they benefit the population as well? Do they find public acceptance?

There are enough health stations in which only two to five patients are seen daily. In many countries almost the whole population uses traditional healers, private pharmacies which are not limited to selling medicine or private doctors. The institutions of simplified health services are thus not naively accepted. They are compared to other opportunities for treatment and often make a poor showing in regard to curative medicine. Preventive medicine is usually left to the sector of public health. The preventive side of simplified medicine does not usually have such competition, but it is often no less problematical with respect to its efficiency and acceptance by the population. If one observes the usual range of the services of preventive medicine at the base of the health care system, the especially narrow limits of the services are clearly shown in respect of their effectiveness and efficiency. They do not and cannot attack the root of the problem which lies in the policies of production and distribution of income and property.

There are examples in Latin America - I am thinking in particular of Panama and Chile before 1973 - which demonstrate that the mobilized population often understands this sooner than many a politician in the health sector<sup>22</sup>. The mobilized and activated are demanding from the health sector not much more than good hospitals for in- and out-patient treatment. At first sight, this seems to contradict the logic of preventive and also simplified medicine. It is rare for the population to demand the preventive measures offered at the bottom of the health service; its limitations are all too clear to the public. In most cases the very modest intervention areas prescribed by the World Health Organization cannot even be realized by the health sector: measures for social security, health education in schools, food production and distribution, land reservation, standards for working conditions, irrigation, etc<sup>23</sup>. The actual range of preventive medicine in most health care systems is too small to convince the population. For the people know or guess that their health condition can only be drastically improved if influence is brought to bear on local plans of production and their achievement, on investment policy, exports and imports, land ownerships, price policy, etc. All other measures do not go far enough. They consolidate by nutritional education the status quo of agricultural production, just as despite medical prevention of individual illnesses the basic foundation remains for all diseases of the poor within the social structure. They are therefore often considered by the mobilized population to be an alibi for lack of government in these strategically important areas, and an alibi to do even less for the most urgent curative care.

This argumentation may be exaggerated, but it clarifies the problem. The problem lays in the provision of good curative medicine concurrently with a policy of preventive health and social care which does not stop at the boundaries of ministerial responsibility. In the actual practice of health policies in most countries neither the one nor the other is achieved for the mass of the population, even if simplified medicine according to theory could prepare the way for such policies. At present there mostly exist mere compromises between curative and preventive medicine. Sometimes simplified health services seem to present these poor compromises in petrified form.

What do simplified health services in view of this situation, or what can they offer the mass of population? Should they not first be instituted when progress has been made on the significant fronts, i.e. on the front of good and broad curative medicine and the forefront of the health sector, i.e. broad and extensive prevention? Are not health services a waste of scarce resources, since they cannot preventively attack the roots of existing conditions and at the same time offer primitive curative medicine for the masses? Is it not therefore defrauding the masses to waste money on a few basic health workers, who lack not only adequate materials to carry out preventive measures but also adequate training, advanced training and supervision in order to achieve that which they are able to do: good diagnosis and therapy for the most common diseases?

I cannot and will not offer any patent solution. I only wished to demonstrate by means of these critical remarks that simplified medicine is no panacea to improve health care for a whole population. It is at least no patent solution within the socioeconomic framework of the health care sector in many countries. For all too often simplified medicine, good in theory, has proved bad in practice, degenerating to primitive medicine. I believe it necessary to make this admission even as a convinced exponent of this type of health care. For theoretically I see no reasonable alternative to a simplified medicine which attempts to achieve quality in health care and equality of care for all population groups, rich or poor, Christian or Moslem, black or white. Quality and equality of medical care need not be contradictory, even if simplified medicine is only a first step in this direction. But it is as well a significant step, since its goal is the uniting of social, economic and medical arguments. Until now this has always been more of a hope than a reality. In reality, basic health workers are often simply placed alone in the wilderness without training, further education and supervision, and burdened with excessive duties. This is neither economical nor effective. It is a waste of resources and a deception of the masses. But there are examples, still too few, of practicable systems of simplified health services. The above mentioned UNICEF/WHO report gives some examples. One could add some experiences in Latin American countries, especially in Venezuela, Panama and Guatemala. But all these examples are not convincing until the costs and the effectiveness in terms of better need satisfaction of the impoverished masses have been assessed precisely. Only a constant and in-built evaluation of apparently well-functioning simplified health services can help lessen the problems, perhaps somewhat overemphasized here.

But two points seem to be clear. First, there does not exist a universal pattern of simplified health services which could be applied to each and every country. Second, the lack of connection between the elements of a pyramidal system of health care seems to be the decisive point for many failures in the development of simplified health services. That is the task for the future: supervision, training, advanced training, logistics on the basis of continuous evaluation and - what is even more important - on the basis of a vital sympathy

and empathy with the basic needs of the population.

This is, however, not sufficient. At the same time it is crucial to strive for practical success in the area which is the forefront on the health sector. In most developing countries this involves most of all the policies of agriculture and investment. Here we have to analyse the health implications and nutritional implications of agricultural and investment policies, which sometimes more effectively improve the health status of the population than the best designed health service. Only on this two-way path does it seem possible to transfer the theory of simplified health services into a practice which stresses quality and equality of medical care for the masses.

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