

II. The Case for Expanded Roles for Paramedicals

In the past decades gallons of ink have been spilt in articles describing programmes utilizing specially trained paramedical personnel. Out of this mass of literature and experience has arisen a cohesive body of knowledge which demonstrates rather conclusively the practicality of tapping this source of manpower. At the outset, it seems appropriate to rehearse briefly the reasons for expanding the use of paramedicals in primary health care. The general argument in favour of permitting paramedicals to undertake more of the doctor-like responsibilities is as follows:

1. There is need for rationalization in the delivery systems for health care. Though situations differ from country to country, even officials in the so-called developed world have stressed the fact that new and innovative ways of delivering health care services must be sought. It is generally assumed that the basic technology to assure the good health of the population has been developed. What has yet to be resolved in a satisfactory fashion is the question of how to make the technology available to a given populace through an acceptable and effective delivery system. It has been said:

The major proportion of people in developing countries are not yet aware of health as a concept. What they dimly recognize is the possibility of cure of disease, and secondly, absence of disease. Too many people are born, live and die without ever having the benefit of modern medicine. There is a grave implementation gap throughout the world between our medical knowledge and its application.(9)

The need for pragmatic solutions has often been underscored. One way to accomplish this is to achieve a more rational utilization of existing health resources and a redistribution of manpower roles and responsibilities.

2. There is an acute shortage and maldistribution of medical professionals in most countries. Current tabulations indicate the variances in the doctor per capita ratios throughout the world. Of the Commonwealth countries in Africa, Ghana has one doctor for every 10,510 persons, Kenya one for every 16,300, Nigeria one for every 14,810, and Malawi one for every 48,500. In Asia, Bangladesh has one physician for every 15,050 persons (in rural areas where 90% of the population lives the ratio is one to 30,000), India one for every 4,100, Sri Lanka one per 4,010 and Malaysia one for every 5,600. In the Caribbean the figures fluctuate between one per 3,510 in Jamaica and one per 1,480 in Barbados.(10) These figures may be contrasted with the ratios in the developed world. There is in Canada approximately one doctor for every 580 persons, one per 720 in Australia and one per 700 in the United Kingdom. In some countries the ratio is as disparate for other health professionals. In Bangladesh for example there is one nurse or midwife for 38,540 population.(11)

Ratios which demonstrate the relationship between health manpower and population are meaningless unless discussed in relation to health care delivery systems and community needs. In most countries medical care is provided on a relatively sophisticated level to a small per-

centage of the population. Even the best of these ratios may be misleading for a number of reasons. First, in many of the developing countries, for example, doctors are concentrated largely in the urban centres, whereas upwards of 80 per cent of the population is spread through the rural areas. The doctor/per capita ratio often becomes as disproportionate as 1:100,000 in rural zones while they may be as favourable as 1:1,000 in urban areas.

Second, not all medical practitioners are engaged in providing primary health care services. Even if they were, the demand for health care services is often too great for medical practitioners to cope with all the needs of the people. The choice at present seems to be between relatively sophisticated care or no care at all. There is a need to alter the doctor-oriented health care delivery system. As Dr Halfdan Mahler, Director General of the World Health Organization, has said,

it is nonsensical to insist upon using only doctors or other categories of professionally qualified personnel, if you can standardize or simplify your technology to make it safe and applicable through trained midwives or even people working part-time in health and part-time in other kinds of jobs.(12)

One of the more promising alternatives then is to begin to train and empower a variety of different types of paramedical personnel to provide some of the services now provided by doctors. The aim, however, is not to encroach upon the medical profession; rather it is to develop a rational and efficient way of furnishing basic health care to as many people as possible.

3. Paramedical personnel are available in sufficient numbers in many countries, and can be used to increase the coverage of basic health services.

Once it is recognized that, statistically, it is impossible for the number of doctors in practice at present to meet the basic health needs of a population the question that naturally arises is: who is best suited to assume some of these duties? The answer that immediately suggests itself is to look to the various cadres of paramedical personnel. These can be trained to provide specific and carefully defined services within the health delivery scheme. There really is nothing new in this. Paramedics have been used for centuries to provide a variety of health care services. Even so the idea has really not been exploited fully. The solution is, of course, "a child of necessity".

Examples abound which indicate the statistical sense of using non-doctors. For example the ratios of nurses and midwives per population in selected Commonwealth countries is as follows. In Ghana there is a nurse or midwife for every 1,200 population, in Kenya the ratio is one for every 2,470, in Jamaica one for each 490, Malaysia one per 1,050 and one for 630 in Fiji.(13)

The feldshers of Russia, the "barefoot" doctors of China and the medical assistants of Africa are all examples of how paramedics can be used to augment the health care delivery systems. Of course, it is recognized that in some countries doctors outnumber some paramedical

cadres (in India there are two doctors for every nurse).(14) This does not preclude the possibility of utilizing nurses for primary health care. In any event there are others who can also be trained and utilized as new cadres are created.(15)

4. Paramedical personnel can be trained to perform safely functions normally done by a doctor and to provide other related follow-up services.

It would be a mistake to think that the case for use of health and auxiliary personnel rests on statistics alone. Many proposals to expand the health care responsibilities of paramedicals appear to meet with difficulty because of a concern for the safety of the recipients of the care. The fear is that incompetent care might be provided by paramedical personnel who attempt diagnosis and treatment. This is a legitimate preoccupation. Any expansion of roles of paramedicals must see to the welfare of the consumers and not increase the threat to their health.

In this context we begin with the observation that many of the primary health care duties encompassed by this discussion involve the use of relatively simple, repetitive techniques and skills and that paramedical personnel can be suitably trained to assume these duties.

A substantial body of practice and literature lends support to these statements. In recent years non-doctors have been trained to perform safely a host of functions involving examination, diagnosis, treatment, prescription and surgery, all of which are usually reserved by law to doctors. They have also been taught to identify abnormal cases which require referral to a doctor, and to provide effective follow-up control services. The comparative results of these pilot projects indicate that the performance of these personnel is similar to that of doctors in terms of safety and efficiency.(17)

5. The cost-benefit, cost-effectiveness arising from the use of paramedical personnel is generally favourable.

It makes economic and practical sense to train paramedical personnel to do some of the traditional doctor tasks related to primary health care for at least four reasons.

First, because of the rather urgent need for the expansion of health care services in most countries what is required is a strategy that can produce trained workers as soon as possible. To wait until sufficient numbers of doctors are available would be foolhardy for several reasons, not the least of which is the length of time it takes to train them and the prohibitive costs. Indeed, the evidence is that there will never be enough doctors.

Second, in any event, it is a waste of scarce resources to have doctors doing many of the primary health care tasks. It is more efficient to use non-doctors and where applicable rationally divide the workload between doctors and the more numerous paramedicals. Doctors should only be required to handle the special referral cases requiring their expert attention. Doctors in a sense are a luxury in primary health care.

Third, paramedical personnel can be trained to provide primary health care in less time and in greater numbers, and can be maintained in the field at a lower cost, with little if any loss in the way of safety and efficiency. The same is essentially true where already-qualified paramedical personnel are active in the field. It is merely a question of giving them additional training and authorizing them to perform specific tasks.

Fourth, perhaps too much is made of saving doctor time. By utilizing paramedical services are often brought closer to the recipients of primary health care. It is of little advantage for people to have to make long journeys to get to a clinic where a doctor is present to receive treatment which could be given otherwise. Costs in time and money for the people can be lessened if service delivery is achieved through paramedicals within the community.

6. Because of their proximity to the consumers, paramedical personnel can be effective conveyors of health care.

One of the factors which determines the success of any health programme is whether the consumers accept it. This often hinges on whether they have confidence in the personnel who offer the services. Where consumers receive treatment from individuals who are known to them, individuals who can take the time to allay their anxieties rather than treat them summarily, the reliance on these individuals for health care services tends to increase. This is no less true in the area of primary health care. The advantage is that paramedicals will often be closer to the people in socio-economic terms and in many instances may be selected from among the groups they serve.