

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Paper prepared by the Commonwealth Secretariat

The annual budgets of health ministries and of university medical schools and their teaching hospitals together represent a significant proportion of their countries' annual national expenditure, particularly in the developing world. In view of this and of the importance of these institutions for the implementation of the health programmes of the communities they serve, it is surprising how slender are the links between health ministries and medical schools in most countries and how relatively little co-ordination of their activities has been achieved in support of national health objectives. The training of health professionals often proceeds independently of the qualitative and quantitative health needs of communities and there is sometimes wide divergence between academics and their training goals on the one hand and health service requirements on the other.

2. Health manpower production is undoubtedly a crucial element in any national health plan. It is in this area that there is the greatest need for social relevance and national self-reliance. In this connection the Director General of the World Health Organisation, Dr Mahler, has recently warned that "if developing countries continue to base their health manpower development on the professional medical and nursing training patterns of the affluent world, no amount of social planning will avail. The social revolution in public health will remain a paper revolution".

3. There is no question, however, about the increasing emphasis that is being placed in most developing countries on the importance of community orientation of their medical programmes. This emphasis is reflected in the increased hours allocated to community health in medical curricula, in the recognition of the need for an appropriate balance between institutional and ambulatory medical care, in the acceptance of the health team concept and in the commitment to train a balanced mix of health professionals. It is difficult, however, to introduce durable changes against a background of established tradition; and, until traditional medical attitudes and expectations have been basically altered, these well-intentioned approaches will continue to fall short of their objectives.

4. National health objectives will naturally vary from country to country in accordance with social and economic development policies; but the health objective of overriding importance in most countries is undoubtedly the provision of an optimal level of health care for all members of society. It is with respect to this objective, therefore, that there is an urgent need for a reappraisal of the traditional roles, functions and responsibilities of health ministries, medical schools and related agencies and for co-ordination of their activities.

Some characteristic approaches to community health development

5. In most countries there has been a marked increase in recent years in efforts to reorganise and rearrange medical education programmes and systems of health care. The current health programmes of Nigeria, The Gambia, Sierra Leone, Ghana and Liberia in West Africa, of Kenya, Uganda, Tanzania, Botswana, Malawi, Zambia, Lesotho, Swaziland, Mauritius and Seychelles in the East, Central and Southern African region, of the Commonwealth Caribbean and of Commonwealth countries in Asia and the Pacific, all provide adequate testimony to the widespread emphasis that is being placed on these new health perspectives in the developing world. Fulop (1976) has also commented on the revolution that is taking place in medical attitudes and objectives and on the enthusiasm that is now being shown by government ministers, civil servants and university academics in many parts of the world for speeding-up improvements in their countries' health programmes.

6. The importance of adapting educational programmes to local conditions and community health needs is everywhere agreed; and in almost every country there is a core of highly motivated

and experienced experts enthusiastically promoting new developments and innovations in their countries' health programmes. In spite of this shift of emphasis, however, a real breakthrough has yet to be achieved in most countries. There is still a lack of access to an adequate health service for the majority of the population in most developing countries, and there are deficiencies in the quantity and quality of health care available.

7. A brief examination of the health programmes in countries such as China and Cuba in which a more uniform spread of health care has been achieved, might be of value. In China there has been emphasis on the training and utilisation of para-medical personnel. This is the keystone on which its system of health care has been built. In order to cover the whole population, the Chinese introduced a cadre of personnel less highly qualified than professional doctors, less costly to produce and maintain, and more relevantly trained for the specific tasks they were required to perform. They were not afraid to sacrifice excellence for comprehensiveness. Their success has been largely due to this, to the sheer massiveness of their effort, to the political determination with which it was supported, and to an appropriate ordering of their priorities in relation to their social and economic circumstances (Djukanovic and Mach, 1975).

8. They were able to devise a system of health care delivery which brought the whole population within its reach. Central to this system has been the co-ordination of personnel training programmes and health care systems with community needs. It is appreciated that this system could not be readily taken over in its entirety by other countries. For any modification to be successful, however, it would need to have at least comparable levels of political support and national commitment.

9. The Cuban health services are based on the following principles (Macias 1974):

- (a) that the health of the population is a government responsibility;
- (b) that adequate health facilities should be available to the entire population;
- (c) that the community as a whole should participate actively in health work;
- (d) and that preventive and curative health services should be integrated.

Before 1959 most of the available health resources were concentrated in urban areas, particularly in Havana. The redistribution to the rural areas has since been considerable. Whereas 65 per cent of physicians and 55 per cent of hospital beds were located in Havana prior to 1959, only 42 per cent of physicians and 40 per cent of hospital beds are now located in that city (Benitez, 1976). Simultaneously, there has been a more equitable distribution of ambulatory and hospital facilities throughout the country. The comprehensiveness of health care has been further increased by the wide use of para-professional personnel.

10. A striking feature of the Cuban health model has been the level of community participation that has been achieved. This was due mainly to the co-ordinated efforts of a number of mass organisations which actively encouraged community collaboration with health programmes, and helped to raise the level of health awareness of the population as a whole through planned health education campaigns.

Health perspectives in developing Commonwealth countries

11. Although there is a wide social, economic and cultural diversity throughout the Commonwealth, member countries share a common origin of their systems in health education and administration. For this reason, they tend to have similar strengths and weaknesses, although there are obvious differences between countries and between regions. The methods of reappraisal to be recommended and the solutions that might emerge are therefore likely to have much in common for many Commonwealth countries.

12. Efforts to achieve improvements in community health in most developing countries have been characterised by minor or major adaptations of the traditional health patterns of the more affluent countries, but without any fundamental changes in their operational framework. In the absence of such changes, efforts to achieve widespread improvements in community health, however dedicated, are unlikely to be successful. Allied health personnel are being trained in increas-

ing numbers in many countries, but often without provision of the posts, the career structure or the legislative changes that would be required to make them effective. Few medical schools have adapted their undergraduate curricula to equip their students to undertake the supervisory functions which the extensive use of para-medical and allied health personnel would entail. Community health centres are being opened up in increasing numbers in many areas as “up-to-date” medical developments, but they are commonly left to struggle along in the old framework of traditional emphasis on hospital and specialist care, and with the relatively inadequate provision for ambulatory and preventive health services.

13. Techniques for influencing public opinion on a mass scale remain unexplored or undeveloped in many countries. What are the basic requirements for involving local people in the improvement of community health? In what ways can community participation be encouraged and at what levels? What is the experience of other countries in bringing about participation in health promotion? In what aspects of health care are local people likely to be interested and in what aspects can they make a useful contribution? What is the experience locally with medical education programmes involving the community and what steps can be taken to produce adequate motivation? Answers to these questions would be of critical importance in any country for effective health planning. It is clearly appropriate they should be of prime concern to medical schools and training institutions, to health ministries and their advisers and to all involved in designing national health programmes.

14. The Chinese model of health care delivery, utilising large numbers of allied health personnel, was not a new development. A similar approach has been used for many years in eastern Africa. In Tanzania, for instance, medical care has been provided by personnel with less than full professional training for generations. There is extensive reliance on medical assistants, rural medical aids and village health aids, and more than 80 per cent of the health care available is currently provided by such personnel (Stirling, 1976). The pattern is essentially similar in Uganda, Kenya and Zambia and also in Malawi, Botswana and Swaziland. In Lesotho, nurse practitioners perform the functions undertaken by medical assistants in other areas. Like medical assistants elsewhere, their role in the country's health care services is a major one. Although not so fully developed, utilisation of para-medical personnel is also being rapidly expanded in West Africa and the Commonwealth Caribbean.

15. There are nevertheless few of these countries in which an adequate level of health care is available for more than a small proportion of the population. Among the more important reasons for this are:

- (a) the overall low priority which tends to be given to health in national development programmes;
- (b) inadequacies in health planning and executive capacities;
- (c) inadequate numbers of trained personnel at all levels;
- (d) an overall lack of standards and criteria adapted to local conditions.

16. It is a matter of concern, for instance, that with increasing affluence large new hospitals still continue to spring up in some developing countries and to be regarded almost as national status symbols. This commonly entails the draining-off of both material and personal resources from community centres and rural programmes, retarding their development. It also leads to the production of graduates who have a disproportionate bias towards institutionalised medical care.

17. Medical schools themselves also need to re-examine their roles. Besides providing for the local training of medical graduates to meet national health manpower needs, an important expectation from the founding of Third World medical faculties must have been that they would contribute significantly to national and regional health development. Too often, however, they lay greater emphasis on excellence as defined by the more developed countries than on appropriateness in the context of their own.

18. In order to avoid these pitfalls, university medical schools in the developing world need to keep the objectives for which they were formed closely in sight. They need to recognise the importance of maintaining a continuing awareness of the health priorities of their countries, of

ensuring the effectiveness of their teaching and research programmes in the context of these priorities, of being adaptable and flexible in their capacity to respond to them, and of being innovative and imaginative in the leads they give.

19. In all this they would interact with the activities of a wide range of individuals and institutions: practitioners, other university departments, health ministries, ministries of education, departments of agriculture, nurses and other allied health personnel. Their activities and concerns would take them far beyond university centres into the most remote communities, wherever there are health problems to be tackled.

20. This could be achieved only by the closest possible integration of the programmes of medical schools with the targets of the health ministries in their regions, the medical schools strengthening and extending the functions of the ministries and providing, amongst other things, an academic dimension to the ministries' activities. They would be identified as integral parts of the total system for the delivery of health care and not simply as institutions for teaching, research and scholarship. There are not many medical schools that have defined their objectives in these terms; and there are few governments that have made appropriate provision to enable medical schools to function in these roles.

Current attitudes to community medicine

21. The response by most universities to the acknowledged need for improved community health services has been to increase the curricular emphasis on formal training in community medicine, and many have opened new departments for teaching and research in this subject.

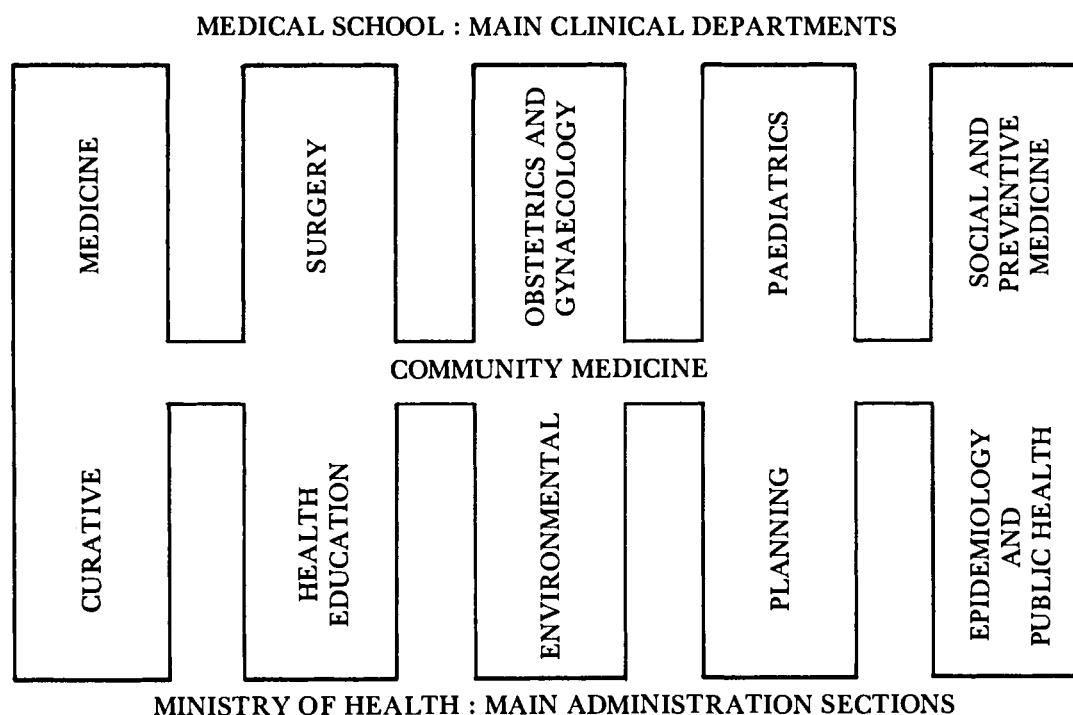
22. The earliest of such departments were established in universities in the more developed countries and the pattern is now being duly followed by universities in the developing world. The new departments have unquestionably given impetus to this new trend in medicine and have attained varying levels of success. The overall extent, however, to which they have achieved their objectives needs to be re-examined.

23. New university departments are frequently off-shoots created to deal with subjects that have increased sufficiently in complexity and importance to be recognised as specialities in their own right and to require a specialised staff for teaching and research. Special courses are subsequently offered; then comes the granting of their own diplomas, etc. The development of departments of community medicine in most universities has been along similar lines. It is possible, however, that the importance of this line of development for promoting community health and for motivating students towards it has been over-emphasised. It may even have a contrary effect. Far from opening up new horizons, there has been a tendency for many of these new departments to follow the old-style pattern of university academic development and to become oases of excellence shut off from the immediate world of pragmatic imperatives.

24. The new department also runs the risk of distracting attention from the need for more radical and basic medical reforms. It sometimes comes to be regarded as adequate testimony to the fact that the faculty is keeping up with modern trends and that its academic priorities are now both relevant and appropriate – even though the greater proportion of the funds available to the faculty continues to be expended uneconomically or on low-level priorities. A small share of these funds having now been diverted to the new department, agitation for change ceases. The emphases, however, of university teaching on the one hand and the pattern of expenditure on health and the organisation and administration of community health care systems on the other continue essentially unchanged.

25. Community health cannot be improved simply by adding a new department of community medicine to existing university departments, or a new section for this subject to the sections normally found in ministries of health. Community medicine is more appropriately conceived as the basis for each and a unifying concept for all of the departments and sections of both institutions (see illustration below). It is a concept, a definition of medical emphasis, a statement of intent. It cannot be administered from one university unit. The responsibility for it cannot be that of a single department, or even of the medical faculty as a whole. This responsibility can be vested only in the overall national system of health, the system in which medicine is both taught and practised.

Schematic concept of the relationship of "community medicine" to medical schools and ministries of health



26. If responsibility is to be assigned to a single body, then, insofar as community health in the final analysis is a matter of national policy, the responsible body must be the government of the country. A lesser level of commitment or responsibility would not be appropriate and would be unlikely to achieve the required results.

Conclusions

27. Models of health care and professional training programmes that are designed to meet defined local health needs can be expected to achieve a higher proportionate return in terms of community health improvement than adaptations from abroad.

28. Effective national health programmes require the highest level of political support and commitment.

29. Ministries of health and university medical schools must be key pieces for any appropriate model of health care; and in the complex calculus of integrating and co-ordinating the functions and responsibilities of these two institutions essential first steps must surely be:

- (i) a reassessment of the role of the modern medical school as an instrument of national development in health and of the adequacy of its programmes to achieve this;
- (ii) a simultaneous re-evaluation of the health care systems which health ministries operate and their appropriateness to meet community needs;
- (iii) an examination of the interface of the related roles, functions, and responsibilities shared by university medical schools and ministries of health, with a view to providing a revised operational framework in which each institution could make its optimal contribution towards the country's health objectives.

30. It is precisely at this interface, of course, that conflicts and confusion of responsibility will arise. Territorial jealousies and suspicions are bound to occur. Yet articulation and integration of their efforts and resources is essential and logical. The role of each institution would sometimes be that of a prime mover, sometimes that of a co-equal partner, sometimes that of a resource upon which the other draws. It is on the basis that the necessary sequence of national meetings, discussions and studies should be initiated; and it is to this commitment that national cabinets would need to give support.

Recommendations

31. International and inter-regional Commonwealth collaboration in pursuing these objectives is recommended.

32. The initial studies would be too complex and too time-consuming to be undertaken as part-time commitments by the already heavily-committed staff of universities or ministries of health. They would need to be carried out on a full-time basis by individuals specifically commissioned for this purpose.

33. They would also need to be action-orientated with a view to arriving at a sequence of practical recommendations to be followed by universities, health ministries and governments, and not merely aim at achieving yet another analysis of community health problems.

34. Definitive future recommendations for each region would need to await the findings of the proposed studies. The suggestions given below are, therefore, only preliminary and merely propose the framework in which the initial studies might be undertaken.

35. Studies might be carried out by a team of Commonwealth consultants composed of:

(a) a full-time convenor for each region, preferably someone from within the region, who would collate all relevant information, convene appropriate committees, initiate workshops, study groups and discussions, and prepare a local report and recommendations;

(b) an overall co-ordinator and chairman who would be appointed in consultation with all the regions and who would:

(i) ensure uniformity of approach within and between regions;

(ii) co-ordinate the work of the regional convenors and collaborate with them in the preparation of final reports and recommendations; and

(iii) suggest a time-frame and operational sequence for the implementation of recommendations.

36. The terms of reference for these consultants might be:

(a) a reassessment of the role of the modern medical school as an instrument of national development in health and the adequacy of its programmes to achieve this;

(b) a simultaneous re-evaluation of the health care delivery systems which health ministries operate and their appropriateness to meet community needs;

(c) an examination of the interface of related roles, functions and responsibilities shared by university medical schools and ministries of health with a view to providing a revised operational framework in which each institution could make its optimal contribution towards the country's health objectives.

37. To ensure continuity in their implementation, the recommendations of the team, once accepted by Health Ministers in Commonwealth regions, could be followed up at the regular annual meetings of the Ministers and those of their advisers, at which it is anticipated that there would be adequate university representation for this purpose.

38. It is envisaged that the chairman might require 9–12 months for his work, the work of each regional co-ordinator being some 3–4 months, and the total overall period of the study by the team being approximately 12 months.

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THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of New Zealand

Two universities in New Zealand have founded full medical schools: Otago since 1876 and Auckland since 1968. The majority of New Zealand doctors graduated from the Otago School, but since November 1974 graduates have been emerging from the Auckland Medical School. Otago, in order to cope with the clinical teaching of an expanded number of students, established two clinical schools, one in Christchurch and one in Wellington, the latter taking fourth-year students for the first time in 1977. These two clinical schools have considerable autonomy, but their resources are derived from the Otago University budget; the degree given is from the University of Otago.

2. Each of the four clinical schools (assuming that in Otago and Auckland the clinical component of the medical course is the equivalent of a clinical school) is associated with hospitals run by hospital boards, responsible to the Minister of Health. None of the hospitals are strictly university hospitals, and indeed the association between the hospitals and the university is established in each centre in a slightly different way, but under a section of the Health Act which provides for Joint Relations Committees. Otago has a special relationship based on membership of the hospital board itself.

3. The result of this is that there needs to be strong co-operation between the universities on the academic side and the hospitals on the clinical side, to achieve the overall requirement of training of doctors, and with it the training of a number of health related professionals.

The Health Ministry and medical schools

4. The Minister of Health has overall responsibility for the Health Department, and the Health Department in its Hospitals Division has a major interface with the universities as indicated above. The Clinical Services Division of the Health Department also has a close relationship with the general practitioner programme and thus with training in general practice being established at present under a separate Council of Postgraduate Medical Education.

5. The Health Ministry, through the Minister and its advisers, of necessity maintains a close relationship with the financial policy concerned with the universities, set by the University Grants Committee. The chairman of the University Grants Committee has an independent source of finance derived from Vote Education, and this is disbursed through the universities in the form of block grants towards maintenance and salaries for all university personnel, and this includes medical schools. The University Grants Committee also provides building funds for medical schools. As a result, there needs to be a close association between the permanent head of the Health Ministry (i.e. the Director-General of Health) and the Chairman of the University Grants Committee in the overall co-ordination of the activities of the two bodies. The University Grants Committee has no separate sub-committee dealing with medical matters, and so in fact the deans of the schools through their vice-chancellors are advisers to the University Grants Committee in a similar way that hospital boards and superintendents advise through the Division of Hospitals Director to the Director-General of Health.

6. The Medical Council of New Zealand is the registering body for medical practitioners and in its Act it has a clear responsibility for the level and standards of medical education. For this reason it contains a number of medical practitioners, but also ex-officio the Director-General of Health and the two deans of Otago and Auckland Universities. This council therefore has the responsibility of looking at educational standards of the universities and relating them to the

requirements of the country in terms of the medical practitioner's role. To do this, a statutory sub-committee of the Medical Council was established in the 1968 Act, known as the Medical Education Committee Act, and this also includes the two clinical deans who are not on the council and a number of other appointees representing both the universities and also the colleges concerned with specialist and general practitioner postgraduate training and diplomas. This committee has the statutory right of supervising the immediate postgraduation conditional registration year, and to do this has established a system of supervisors in the approved training hospitals, and maintains the approval by a series of hospital visitations. The Medical Education Committee, through its college members and indirectly through the Medical Council itself and the Specialist Register, can also influence the standard of postgraduate training and specialist practice in the country.

7. The Medical Council is at present looking closely at the whole question of medical registration and the postgraduate training of the medical practitioner, and is giving some consideration to limiting the style of practice of individual specialist members of the profession, for instance looking at the possibility of limited registration, or licensure, within only one branch of medicine. The Medical Schools by virtue of their involvement in these committees can feed in opinion from the academic institutions where the original standards are established. The Health Ministry therefore has alongside it an independent statutory body with strong associations across into the Medical Schools, concerned with education. Further co-operation between the Health Ministry and the medical schools is established by the involvement of academic staff members in various committees. For instance professors of medicine may sit on the Pharmaceutical Advisory Committees or on the Obstetrical and Gynaecological Service Advisory Committees and from time to time are appointed as official consultants to the Health Department.

8. At the level of the hospital boards in the four major regional areas concerned, there are Joint Relations Committees for particular bodies, on which both the hospitals and the universities are represented by both senior administrators and practising clinicians and superintendents. At a lower level still, there are many hospital committees which include university members, for instance the Appointments Committee at a hospital very frequently includes senior academic members, and likewise when appointments are made in the academic departments, hospital members are involved. It should be made clear, however, that academic heads of departments are not automatically heads of the service departments in the respective hospitals. In some instances they are, by agreement; in others they are head of their own section within an overall division, e.g. the Division of Surgery. The influence that academic members may have will vary considerably, but in general they do not, as of right, have responsibility for overall service commitments in the hospital.

Manpower considerations

9. A major overall health responsibility is the proper training of the medical practitioner and ensuring adequate numbers of medical practitioners in the country. The universities have a special responsibility:

- (a) in the graduation of an appropriate number of local graduates, and
- (b) in the supervision of overseas graduates, either in supplementary training or in post-graduate training.

The Health Services Research Unit of the Department of Health has a close relationship with a specific sub-committee of the statutory Medical Council, known as the Medical Practitioner Data Committee, on which the medical schools are also represented. The Medical Council itself is able to collect very accurate data through an annual computerised return from each doctor in the country and, on the basis of this data, information is made available to the medical schools and to the Health Department. An annual meeting of medical manpower is held in which all bodies are represented, and it was such a meeting in 1976 that predicted that the present output of doctors would be sufficient for ten years.

10. At the present time, both medical schools (incorporating their clinical schools) are increasing the output of doctors, and by 1980 Otago will be graduating approximately 190–200 doctors,

and Auckland by 1982 will be graduating 120–130 doctors. The overall output is thus expected to be round 310 and this is expected to bring a doctor-to-population ratio of 1:630 by 1986 (the 1975 figures are 1:800). The standard of the New Zealand graduate is determined by the faculties of medicine in the respective universities, and this in itself is subject to annual discussions between the two universities and of course to decisions in the final instance by the boards of examiners. Major changes in the structure of the medical courses and of the subjects taught are subject to discussions between the two universities, and because of the relative ease of communication in New Zealand unofficial discussions do occur with the authorities in the Health Department. Nevertheless, the Health Department has no direct influence on the courses designed by the universities, but can influence these indirectly, for instance by promoting general practitioner support for teaching health centres. The Department of Health also has to approve new developments within hospitals, for instance radiotherapy etc., and in doing so takes into account the academic potential of the associated school, and very often academic members are advisers to the Health Department on individual matters of this nature. A good example is the recent appointment of a two-man sub-committee, the convener being the Professor of Radiology at the Auckland Medical School, to advise the department on which model of C.T. scanner would be best for New Zealand's needs.

11. The universities and their associated medical schools have not been strongly involved in the training of other health professionals in this country. Otago has a school of pharmacy and Auckland and Otago have some indirect association with physiotherapy schools run by the technical institutes. Similar arrangements are being made in the dietetic field. The basic education for registered nurses is in the process of being transferred from hospitals to the technical institute system. There are no immediate plans for such basic education within the university system but nursing studies for nurses already registered have been incorporated within the degree/diploma structures of both Victoria and Massey Universities. Social workers are largely trained in other departments in the university but at the local level there are relatively close relationships. There is support for the concept of grouped health sciences education on technical institute campuses.

Other roles for the medical schools

12. Inevitably the medical schools in the four main centres, and their various associations with other hospitals and community health activities, establish standards and foster research that might not exist in the absence of an academic institution. Medical research in particular is under the overall support of a Medical Research Council funded through Vote Health. In addition to this there are many funding agencies derived from voluntary associations like the Child Health Foundation or the Heart Foundation. The universities take the view that because of the major funding to the Medical Research Council and the assessment by the Research Council of grant applications etc. they will not normally put much money into the specific funding of either posts or equipment in medical research, but only establish the departments and the basic equipment necessary for that research. This has worked reasonably well in the past, but there are difficulties at the present time with the clinical schools being built and expanded, and equipped, at a time of national financial deficiencies. The Medical Research Council again has both the Director-General of Health and the two deans on it, and so co-operation at this level is obtained between the Health Ministry and the schools, and of course the bodies who nominate to the Medical Research Council. It is the job of an independent lay chairman of the Medical Research Council to negotiate with Vote Health for the funding for the Medical Research Council.

13. Medical schools can be of considerable help to the Health Ministry in taking over areas of research in a form of contract research, although this has not been widely used as yet. The Medical Research Council is moving to establish close relationships with the Health Services Unit in the Health Department. It may be asked whether the medical schools are sufficiently aware of advanced Health Department planning and able to adapt to the changed circumstances that may result. The available talent for any new development almost always involves advisory members of committees coming from the medical schools, who themselves are in fairly close co-operation through an annual meeting, and also through individual meetings in inter-disciplinary associations. An example of this has been the whole development of health centres and the training for general practice where a major lead has come from the associate-deans in Auckland and Otago, who have

been heavily involved in postgraduate training and are both members of the Postgraduate Council. The Health Centres Advisory Committee includes academic members and so it is unlikely that any major development in the health services would occur without the universities involved in membership of the appropriate committees.

General comments

14. The foregoing explanatory notes may indicate that the situation in New Zealand is very satisfactory. Indeed, in some areas because of the size and the relatively spread-out nature of the country, a committee structure exists which is serving a number of purposes, including the inevitable exchange of information between the universities and the Health Department. Some of this is fortuitous, and some, for instance in the Allocation of House Surgeons Committee, is deliberate because it is the university that knows the number and quality of the house surgeons who are coming forward for the hospital service. At higher policy levels like the Medical Council, good co-operation can be obtained and leads to decisions which seem to be in advance of those which can be obtained in a country such as Australia with Federal and State organisation. There are one or two very important committees being established at the policy level and the Minister's Special Advisory Committee on the Health Service contains at least two academic members, and it would be most unusual for such matters not to reach the ears of the university authorities.

15. One of the fairly considerable difficulties is at the level of the hospital boards who run the medical schools. The Joint Relationship Committees on the whole work well, but in times of financial stringency different financial mechanisms within the Health Department on one hand and the universities on the other, the latter having more independence, make for considerable problems in the proper allocation of responsibility. This would be the area of most difficulty and stems from the fact that the structure of the hospital boards in New Zealand is an attempt to give some local control at the same time as maintaining financial accountability in the central Health Department. The University Grants Committee, on the other hand, de-centralises large blocks of money to the universities who are given a great deal of independence. The question of university nomination to hospital boards is under trial in Otago and seems to work reasonably well, but in larger centres such as Auckland and Christchurch, no great enthusiasm has been shown by the universities for representation on the hospital boards.

Summarising

16. The population size of New Zealand makes planning relatively easy by a mixture of central committees and de-centralized responsibility. The Health Department must depend a lot either directly or indirectly on medical school members for advice and this ensures good exchange of information. The site of greatest weakness is lower down at the hospital and community health service level where co-operation is often excellent but action becomes difficult because of different financial systems and problems of allocating fiscal responsibility. It is fortuitous but not unhelpful that the Director-General of Health and the two deans of medicine from Otago and Auckland are friends from the same graduating medical class in Otago in 1948.

28 September 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of Ghana

The roles of the Ministry of Health and medical schools in national health are fully recognised in Ghana. There are therefore informal consultations between the Ministry and the medical school authorities. Indeed, these consultations have been found to be so useful that there are now plans to formalise and institutionalise these linkages.

2. Medical schools can certainly play a useful function in national health development apart from the training of doctors, but because of the lack of formal linkages with the Ministry of Health they have yet to fulfil the relevant functions in the development of appropriate health care delivery systems in general and health manpower development in particular.

3. It is recognised, for example, that medical schools can make a substantially reliable and meaningful contribution to health services development through the promotion of biomedical and health services research activities directed at priority or specific health problems, for the purpose of finding appropriate solutions and developing appropriate tools for low-cost but effective and efficient health care delivery systems or disease control programmes.

4. The University of Ghana Medical School, which formerly produced only doctors, is now involved in the training of health laboratory technologists in collaboration with the Ministry of Health. Although some individuals have expressed doubts about the capabilities of the products to meet the basic health needs of communities, particularly with regard to the surveillance and control of endemic diseases and the organisation of activities for health promotion and protection, there have not been any efforts in the past to evaluate the tasks that they are trained to perform as against the tasks that they should be able to perform in terms of the community health problems and needs. Insofar as the performance of tasks related to diagnostic and curative services (i.e. clinical duties in hospitals) are concerned, however, there are no doubts whatever about the performance of products of the University of Ghana Medical School.

5. With regard to the School of Medical Sciences of the University of Science and Technology, this institution is in only its third year and so it is not possible to draw any valid conclusions about the quality of performance of the products. Unlike the first medical school, it intends to train not only doctors but also other health professionals such as parasitologists, medical entomologists, biochemists and microbiologists.

6. Perhaps it is worth mentioning without boasting that so far the products of the University of Ghana Medical School have been found by the external examiners from Britain to be of very high quality, comparable with students from any institution in the developed countries. The few who have done postgraduate medical education and training in Britain have highly impressed their supervisors and passed their examinations at the first attempt. This is obviously credit to the system of education and training.

7. As was mentioned earlier, there is currently an effective system of co-operation between the Ministry and the medical school on an informal basis but more formalised and institutionalised linkages are now being considered. Until recently, the only medical school in the country has been involved in the planning and implementation of health programmes on an informal and person-to-person basis; the results have been so encouraging that the need for co-operation and collaboration on a more formal basis is now recognised. In the Ghana experience, the informal approach has been found to be effective but obviously formalising and institutionalising of linkages with clearly defined objectives, functions and responsibilities is not only desirable but essential. Thus there could be joint committees to consider such matters as:

- (a) the education and training of health personnel;
- (b) the evaluation of education and training programmes and also the performance of field workers;
- (c) formulation of health manpower policies and health manpower development programmes; and
- (d) biomedical and health services research activities.

28 September 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of Tanzania

Ministeries of health and medical schools play an important role in national health programmes and in particular their joint efforts are required in health manpower development. However, it is a true observation that in many countries there is little co-ordination of their activities and the links of communication between them are slender. Such a situation should not be allowed to continue.

2. We know that no health service can run satisfactorily without there being adequate numbers of suitably trained staff. In Tanzania the training of the required health manpower is undertaken by the Faculty of Medicine of the University of Dar es Salaam and the Ministry of Health and also by voluntary agencies under the guidance of the Ministry of Health. The Faculty of Medicine has so far concentrated on undergraduate and postgraduate training for doctors and the training of pharmacists, while the Ministry of Health has concentrated on the training of medical auxiliaries and para-medical staff. One therefore identifies two groups of medical educationists: those in the University Faculty of Medicine and those in the Ministry of Health.

Training objectives

3. The objectives in our training programmes are as follows. Firstly, health staff should be trained to well-defined tasks and employment opportunities with special attention to their future responsibilities in Tanzania's health services. Secondly, training should provide Tanzania with suitably qualified medical personnel in sufficient numbers for the country and capable of providing the various skills required to improve the health status of Tanzanians and mitigate prevalent health problems. Thirdly, training should be localised; that is, as far as possible all medical training programmes should be in Tanzania. This will ensure that the trained personnel will be conversant with the local needs and resources. It is essential that both the Faculty of Medicine and the Ministry of Health should be mutually committed to these stated objectives and the achievement of these objectives will require close collaboration between the two. That the medical graduates are trained mainly for the Ministry of Health is enough reason for the Faculty of Medicine educationists and those of the Ministry to work together.

4. The basic problem is that while medical educationists directly under the Ministry of Health receive policy directives from the Ministry, which also finances its training programmes, the Faculty of Medicine is under the jurisdiction or guidance of the Ministry of National Education. This means that the two groups of educationists are answerable to different authorities. This divergence of answerability has contributed in no small measure to the unsatisfactory state of co-ordination and co-operation between the Ministry of Health and the University Faculty of Medicine. Not only that, the pathway involved in the desires of the Ministry of Health reaching the Faculty of Medicine is tortuous and indirect.

Present means of co-ordination

5. Although it must be admitted that co-ordination of their activities and collaboration of effort between the Faculty of Medicine and the Ministry of Health is not as much as one would wish, there are already forums for common discussion and implementation of national health programmes. The Faculty of Medicine is a state institution and therefore gets guidance for its activities from the Government. As such, its activities cannot be at variance from those expected by the Ministry of Health. As an institution the Faculty of Medicine has three major functions: the teaching of undergraduate and postgraduate student doctors and pharmacy undergraduates; the day-to-day

service of Muhimbili Medical Centre, which is the largest consultant hospital in the country; and research. All these functions have a direct bearing on the national health programmes.

6. There are several boards and committees where representatives from the Ministry of Health and the Faculty of Medicine work together. The Ministry of Health is represented on the Faculty Board, a decision-making body for the activities of the Faculty of Medicine. There is a Joint Postgraduate Selection Committee responsible for postgraduate training. There is also a joint committee for the allocation of locally trained specialist doctors for employment in the medical school and the Ministry of Health. Medical students utilise health service units run by the Ministry of Health as practice areas. There is a great shortage of teachers and teaching skill. Qualified or competent teachers are required for the growing numbers of our auxiliary and para-medical schools. Many of the few teachers we have are in the medical school. This has led to the free use of educationists belonging to the Faculty of Medicine and those belonging to the Ministry of Health for teaching assignments in the schools run by the Ministry of Health and the medical school.

7. There is therefore already established quite a substantial area of co-operation between the Ministry of Health and the Faculty of Medicine. All this however falls short of the creation of a joint policy-making body, which would be a logical way to achieve concrete co-operation and collaboration between the Ministry of Health and the Faculty of Medicine.

Machinery for health manpower planning

8. We need to have a National Health Planning Committee which would be charged with the responsibility of planning national health programmes and preparing guide-lines for the implementation of all national health programmes. Such a body would merge into a composite whole the interests of the Ministry of Health and the Faculty of Medicine, since in essence both are working towards one common goal of providing enough health manpower of the right categories of staff required for running national health programmes. This body would be the one to develop health manpower plans. Such plans should define not only the numbers and categories of health personnel to be trained, but also indicate the knowledge, skills, attitudes and the area and level of competence needed to carry out the tasks and functions to be performed by each of them. The Ministry of Health would provide the job descriptions and employment opportunities for the different categories of workers required. From the job descriptions medical educationists would draw up relevant curricula and training schemes and then train the staff adequately for the particular tasks they are destined to perform.

9. Finally, the Ministry of Health and the Faculty of Medicine should have machinery for evaluating the performance and effectiveness of health personnel trained in relation to the health care required to the satisfaction of consumers. They should ensure that there are no divergencies between academic and training goals, on the one hand, and service requirements, consumers' expectations and life style and (most important) the general socio-economic situation, on the other.

7 October 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of Sri Lanka

In Sri Lanka the medical schools come under the Ministry of Education. Such a separation without the involvement of both the Ministries of Education and Health is undesirable. Medical graduates are required to serve a mandatory period of internship of one year duration prior to registration. They may select for internship six months in either medicine or paediatrics and six months in either surgery or obstetrics and gynaecology. This internship pattern is in line with the requirements for registration in the UK. Till 1972 once a medical graduate fulfilled these requirements, he was eligible to be registered with the General Medical Council of Great Britain.

2. The intake of medical students of both the medical schools is 250 annually. Some 225 medical graduates pass out annually and the annual loss to the country due to retirements and emigration is almost 150, leaving 75 medical graduates to meet the needs of the expanding health services in the country, which is quite inadequate. Proposals for expanding the existing medical schools so as to accommodate an increased intake of medical undergraduates are under ministerial consideration.

3. The population of Sri Lanka is 14.01 million, of which 80 per cent live in the rural areas. In such a situation the essential need is for community physicians thoroughly conversant with the health needs and disease patterns prevailing in rural areas. Medical education should meet the specific needs and demands of the community. The objective of undergraduate medical teaching as stated by a WHO Expert Committee (1967) is that "in educating the physicians one must aim to develop the knowledge, skills and attitudes necessary for the care of people in sickness and in health. Such care includes prevention, treatment and after care and rehabilitation of all illnesses in the community as well as in the hospital". Medical training should not only be given in the teaching hospitals but also in the smaller hospitals and in the community. This will be a vital and forward step in a developing country as the doctors will be mostly working in those areas to serve the large number of rural population.

4. The training in medical schools had unfortunately not been geared to meet the needs of the community. The curriculum for medical undergraduates had hitherto been academically inclined and tailored to disease patterns prevalent in the developed countries. This no doubt stemmed from the fact that postgraduate and specialist qualifications were and still are entirely obtained in the UK.

5. An effort is now being made in the two medical schools to modify the curriculum in keeping with the needs of the community. Emphasis is being placed on preventive and social medicine. During the third and fourth years of their training, students are assigned families in two project areas, one in Peradeniya and the other in Colombo, and they are responsible for their welfare and total health care. They are concerned with family health, which embraces maternity, child health, immunisation, nutrition, environmental sanitation and family planning. Such an exposure makes the student aware of the problems in the country. It is of significance that 40 to 45 per cent of all indoor and outdoor morbidity in this country is due to preventable diseases and this being the position one realises the importance of developing a medical graduate who is community oriented. It is essential that subjects like behavioural sciences, human ecology, sociology, psychology and more of psychiatry are included in the teaching. There should be increased emphasis in the field of community medicine, emergency medicine and ambulatory medicine. The present-day doctor should not be trained as a "global doctor" but trained primarily in the scientific methods and to deal with the health problems of our people using the resources and facilities available to us. It is because of this failure that very often the doctor who qualifies now does not get job satisfaction

and looks out for openings abroad. In addition the graduates who pass out from the medical schools are mostly clinically oriented and desire to specialise in a clinical speciality.

6. In order to solve this problem, it is very desirable that there should be very close liaison between the Ministry of Health and the Ministry of Education and a joint committee should be set up which should include officials of both the Ministries, who should lay down guidelines for undergraduate training which would meet the health needs of the country. Action is presently being pursued on these lines.

7. Even with regard to internship, there should be a different approach. Instead of following the pattern of developed countries with the purpose of recognition being given to our medical graduates, we should change the pattern of internship to enable the intern to come closer to the community once he has graduated. An internship training in community medicine, as is happening in India, will be very useful and beneficial. Every medical graduate should do an appointment of at least three to six months in community medicine and should be positioned in a rural community during this period. This will expose him to the real health situation in the major part of the country. We are expecting to effect this change in the near future. In the past the health services had been dichotomised into specific preventive and curative services. Integration of services has now been effected whereby both the prevention and therapy of disease are the specific functions of all medical officers. The teaching in medical schools has been similarly integrated.

8. The medical schools in this country, besides undertaking the training of doctors, also train a category of personnel referred to as assistant medical practitioners. Their training course is of two and a half years duration followed by six months internship. During this period they receive basic training in the disciplines of medicine. This category of personnel is specifically trained for appointment to rural areas to afford first contact medication in view of the dearth of fully qualified medical officers. The capacity of the two medical schools to train this category of personnel is limited to 70 per year though the requirements of the country are greater.

9. At present we have eight schools of nursing and they undertake the training of nurses, which is a three-year course leading to a general certificate in nursing. There is also a post-basic school of nursing which prepares nursing personnel to function at higher levels in teaching, administration and specialisation. It also has a department of continuing education which caters to the service needs of the health services. The faculty members of the two medical schools also function as lecturers in schools of nursing in Kandy and Colombo and also in the post-basic school of nursing in Colombo. The Medical Education Unit of the Peradeniya Faculty has given a refresher training to all tutors of nursing in educational technology, thus strengthening the teaching/learning process and curriculum development. Besides this the medical schools propose to undertake the training of nurses leading to a degree in nursing. A committee has been set up for this purpose by the University to work in close collaboration with representatives from the Health Ministry.

10. The Health Ministry is the major employer of medical practitioners and assistant medical practitioners who pass out from the medical schools. It is vital that the Ministry of Health should involve medical schools in the planning and implementation of health programmes. There should be a constant dialogue between them so that the qualified medical practitioners will be able to actively participate in formulated health programmes.

25 October 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS (HEALTH MANPOWER POLICIES)

Background paper prepared by the Government of Canada

An introduction to background papers prepared by the Government of Canada is contained in document CMC(77) Gen/1.

Medical schools and national health care needs

2. It appears that the medical schools and other health science training programmes have been attempting, at least in recent years, to design their programmes as well as possible to meet the needs of the health care system. (The "development" needs to which they would be relating are generally provincial rather than national in scope.) There have been several examples of new programmes developed to meet identified needs such as expanded training programmes for family physicians and for specialists in rehabilitation. At present, there are proposals to develop training programmes in geriatrics.

3. Both health and education are provincial responsibilities. It is, therefore, difficult to reach national agreements with regard to the numbers and types of workers to be trained for the country as a whole, but some good efforts have been made in most provinces to co-ordinate the efforts of Ministries of Health and of training programmes.

The appropriateness of training programmes

4. With respect to the total supply of health workers, the Canadian health care system is impressive, the population/physician ratio for the total country being 581:1 in 1976, with the provincial ratios ranging from 550:1 in Ontario to 1,182:1 in the Northwest Territories. Approximately 50 per cent of Canadian physicians are general practitioners. Canada is also well supplied with nurses – to the point where there is an unemployment problem for nurses in some provinces. The supply of dentists is about one for every 2,500 Canadians. There is a lack of medical specialists in geriatrics and occupational health, as well as of chiropodists, dental nurses and speech therapists. There is also a problem with distribution, especially of physicians, with the major population and economic centres being relatively over-supplied and the poorer, rural areas being under-served. Various incentive programmes have been partially successful in overcoming these distribution problems.

5. There is some question as to whether our students acquire the appropriate knowledge, skills and – most important – attitudes, to allow them to respond adequately to the changing needs of their communities. There is even greater doubt about whether they are equipped or motivated to promote desirable changes in the existing health care system.

Machinery for co-operation

6. Several provinces have developed advisory committees involving Ministry personnel and officials of health science programmes to plan for appropriate training programmes. These committees make recommendations concerning such matters as the total number of places for various types of health science students at both graduate and undergraduate levels and the distribution of these places among the various training institutions in the province.

Graduate performance

7. The graduates of our training programmes appear to be generally well prepared to perform better than adequately within our health care system. At the present time there is some concern over the need to ensure that they maintain their competence through greater participation in continuing education programmes and possibly through compulsory periodic re-examination for licensure.

8. Another recent development in the effort to ensure high quality training and co-ordination of training of various types of professionals is the proposal to establish a single Council on Accreditation for all health science training programmes.

National self-reliance in health manpower training

9. In recent years there has been considerable expansion of training programmes and facilities, partly as a result of the federal contributions to the development of such resources through the "Health Resources Development Fund" which was established in 1966 and intended to continue until 1980. There have also been professional training grants available from the Federal Government and most Provincial Governments for postgraduate training in the health field.

10. Canada has been self-sufficient with respect to most types of health manpower training for several years, with the few exceptions noted earlier. There are now initiatives being taken to correct the remaining deficiencies. Immigration policies with respect to physicians have also been modified to reflect this situation of self-reliance in the training of doctors.

October 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of Trinidad and Tobago

A general dissatisfaction with the type of medical practitioner produced by medical schools on the one hand, and the systems of health care available to developed and developing countries on the other, has led Health Ministers to question and medical schools to consider their needs critically. The following are some of the sorry facts they found.

2. They found that the cost of providing health care to a nation was phenomenal, and rising, in spite of all reasonable checks applied, whether the system was nationally subsidised as existed in the United Kingdom, or whether the system was based on free enterprise and supported through an insurance carrier intermediary.
3. In spite of the cost, both systems suffered serious imperfections. In the case of the nationalised service, governmental control of professionals bred inefficiency, long waiting lists, and a real inability to restrict the patient to his true needs. In the case of the system epitomised by the United States of America, urbanisation of doctors created over-doctoring in the cities with hardships in rural areas, long waiting lists, and the prospect of relative inaccessibility of even primary health care to the indigent and the infirm in the densely populated inner city (Karmody 1974).
4. Whereas it had been the sole prerogative of the medical schools to produce a curriculum to shape the physician or surgeon prior to the 1960s, four considerations altered this in the 1970s:
 - (i) The increasing cost of health to the national budget and the escalating costs of the university forced health planners and university boards to critically enquire if they were getting value for money spent.
 - (ii) The realisation that health care was fundamentally a political issue and that the group who paid the piper might justifiably call the tune without strict erosion of the university's autonomy.
 - (iii) The realisation that some change in the curriculum was necessary to improve the motivation of young men and women to serve the needs of the community and not only seek the plums offered in some urban areas.
 - (iv) The acceptance of the concept that universities to be meaningful had a joint role to play with governments to attempt to meet the challenges and needs of their community.
5. When attempts were made to define the gray areas in the developing countries, these appeared to be uniformly:
 - (a) a great exodus of professionals and para-medicals to the developed countries with the accompanying loss financially and more seriously of expertise we could ill afford to lose;
 - (b) a significant hard core of malnutrition in infancy;
 - (c) gastroenteritis involving children mainly under five years;
 - (d) diabetes mellitus;
 - (e) hypertension;
 - (f) problems with water and environmental sanitation;
 - (g) a scarcity of dentists;
 - (h) maintenance of laboratory and hospital equipment.
6. Trinidad and Tobago, one of the most stable of the Caribbean nations financially and politically, with a population of 1.1 million in approximately 200 square miles, shared all these problems with

the rest of the Caribbean, even though its doctor/patient ratio of 1:2200 tended to identify it more with the developed countries than with the developing.

7. Even before the revolutionary appeal of the Director-General of World Health Organisation, Dr. Mahler, to all the nations of the world in May 1977, for adequate health care for all citizens of the world by the end of the century, health authorities the world over, and certainly in the Caribbean as outlined in their Conferences of Health Ministers since 1966, had begun to question the system in which large groups of citizens were being excluded from health care, and national health objectives were being redefined to set greater emphasis on preventive medicine, oriented towards improved community health, rather than increased curative medicine centered around larger hospitals.

8. Trinidad and Tobago's Health Minister, in an address to the First International Medical Conference held in Tobago in 1975, observed:

"There is a glaring disparity between the health services available to citizens living in towns and those in rural areas. There is a need to shift the emphasis from curative to preventive and community medicine".

And again, as Minister of Health, he said:

"My policy has been devoted towards dealing with these problems not as distinct entities, but as a coordinated and integrated whole. Our policy is designed to provide the people of Trinidad and Tobago with the type of health care best suited to their needs and within the budget allocation as agreed by Parliament. I have therefore decided to accelerate the attack on communicable disease, improve rural health service and training and innovate utilization of health resources as key areas of the health policy".

9. Philip Boyd in his monumental paper "The Medical Profession and the Health of the People of the Caribbean", delivered to the same International Convention in September 1975, enquired:

"What is health in the Caribbean context? It is certainly not just absence of disease, it is much more. It means that working people are fit and productive and able to acquire and use needed skills, that school children are fit and able to benefit from their education, and that their physical and mental development has not been permanently impaired by malnutrition in infancy.

It means dynamic management of health services. It means that people are suitably well adjusted, that individual families are free from the addictions of tobacco and alcohol. It means that people have determined for themselves the most important community health problems, and are playing their part in solving them.

Health is a basic human right. This being so, society has to work out a system under which all receive health care irrespective of their ability to pay at the time of receiving attention. The medical profession is in duty bound at least to cooperate in working out such a system, and again the Medical Faculty (of our University) should be made more intimately involved in our work and in our councils so that medical education shall in future prepare a doctor able to give community health care in the broadest sense, and thus be better suited to the needs of the people of the Caribbean".

10. It was in this context that the medical schools of the University of the West Indies did what other medical schools in Canada, the USA, the UK and throughout Africa and China had been forced to do: set up a programme more meaningful to the people they served. A decision was taken by the University of the West Indies to pursue the matter. At the Belize Meeting of Chief Medical Officers in May 1977, a decision was taken by the University of the West Indies to send representatives to the Meeting. It was soon made abundantly clear that the University of the West Indies wanted to remain meaningful in matters pertaining to health care in the community. It was proposed to change the curriculum in order to do this.

11. Of course, it is one thing to talk of producing a Caribbean-oriented doctor who will be motivated towards Caribbean expectations and details, by the shortening or lengthening of the curriculum to produce the type of doctor best suited for community medicine. This could be wishful thinking without joint planning on the part of both Ministry of Health and the University, because for success in community medicine one obviously needs in addition to well-motivated medical and nursing staff, a strong and diverse infrastructure comprising:

health visitors	psychiatric social workers
mental health officers	public health inspectors
child welfare officers	nutritionists

For these, provision must necessarily be made by the University in association with their medical schools. To fail to appreciate this is as remiss as expecting a secretary to function without stationery, although it is not uncommon to find a health team sent out again and again to the community without supportive staff and equipment.

12. The position in the Caribbean in general, and in Trinidad and Tobago in particular, is rendered all the more urgent because a decision has been already taken to set up in Trinidad and Tobago an additional medical school of the University of the West Indies. Now that the joint work of Health Ministries and Medical Schools has been recognised, meaningful plans can be elaborated for the general improvement of health care not only for the nation but hopefully for the region. The lessons learned in Trinidad and Tobago which may be regarded as having a foot in both camps, of developing and developed countries, may be of real value to the world as they set about meeting the challenges of the times.

November 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of Western Samoa

Through the years, health has been regarded mainly as a physical condition of the individual and health care a private affair between the patient and the physician. Recently we have witnessed a welcome shift in perspective. Health is now viewed from the standpoint of the individual's total well-being to include not only the state of his body but also of his environment. The concept of the environment itself broad, for it covers both the physical environment and the social environment. This new perspective necessarily brings about a broader concept of health care. The individual is no longer isolated from the community to which he belongs, the concept is thus concerned with his community as well. In addition, the Government of Western Samoa has recently placed a great deal of emphasis on health care delivery to the rural areas. This is in line with the effort of the Government to give increasing attention to the welfare of those who constitute the bulk of the population.

2. The concern for health cannot be separated from our effort towards national development. Health may be seen as an end in itself and as a means to an end. In the context of national development, health is to be considered an essential investment in human capital. A healthy individual represents a potentially productive economic unit that can help propel our economic programmes.

3. An important aspect of our health care programme is health manpower development. Traditionally this task was reserved for the medical schools. The schools produce medical professionals by way of a long and rigid process. Normally it takes eight to nine years to produce a competent physician who may not even care to practise medicine in the rural areas. It is for this reason that attempts were made to channel doctors and nurses to the rural areas by making rural practice a requirement for conferment of professional status. In addition, the Health Department is proposing training programmes for paramedical personnel (medical assistants, primary health care workers etc.), designed to produce a level of competence suitable to the health needs in the rural setting.

4. The Department, aware as it is of the need for health manpower development for the rural areas, has responded in its own way to plan and will implement training locally of primary health care workers and medical assistants to produce a broad range of competence to meet the manpower need for rural health service. The fully-fledged doctors of medicine training overseas will act as consultants and overall supervisors of rural health service as well as working in the National Hospital which acts as a major referral medical centre for the rest of the country. Western Samoa does not have a medical school and relies mostly on overseas medical institutions in Fiji, New Zealand, Australia and Papua New Guinea for the training of fully-fledged doctors.

5. It is common sense to say that a training programme is only as good as the curriculum it prescribes. An irrelevant curriculum would most likely produce equally irrelevant competence. There is therefore a need to create a structure whereby the needs of a community are effectively monitored to the schools and to agencies concerned with the health manpower development, and more broadly to institutions whose main function is the delivery of health care services.

6. The community is not a static system. It is a dynamic system responding to a multiplicity of forces. The schools, including public or private agencies, must be sensitive to the changes occurring within the community. Training programmes, and more specifically the curriculum must be sensitive to the socio-economic and political realities in the community which in the final analysis, is the end user of the competence being fashioned by the programmes. Without this sensitivity training programmes would most likely float about in vacuum. Scarce resources would be wasted in the development of irrelevant health manpower.

7. Moreover, a thorough knowledge of the various forces operating with and in the community, including the specific responses of the community to the intervention of health care delivery programmes and personnel, would go a long way towards mobilising the resources of the community itself for the purpose of improving its quality of life.

8. The delivery of health care is not a matter of transferring goods from the producer to the consumer. Health is not, in fact, a kind of product or commodity. The input of the individual, or the community is very much a part of the entire scheme of health care delivery. This is the reason why the community is to be regarded as an essential variable whose nature must be fully disclosed to programme designers and implementors.

November 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS IN COMMUNITY HEALTH

Background paper prepared by the Government of Kenya

Medical school: to be or not to be

The establishment of a university faculty of medicine is considered to be a very expensive affair. This assertion has been used to delay or stop altogether the development of such institutions in many developing countries, apparently because of the cost in monetary terms. However, considering that human life in a healthy body is invaluable, the establishment of a university medical school should be argued on humanitarian grounds in the first instance, rather than on monetary. Clearly, excellence in the study and practice of medicine is of paramount importance to everyone. The basic approach to medical science may be similar in all countries, but the basic health problems of different regions of the world at any particular point in time do differ, making it important that these should be studied and researched in the environment of service. A good medical school keeps abreast of the rapidly-advancing health sciences and stimulates similar advances in medical practice.

The Nairobi faculty of medicine:

2. The Faculty of Medicine of the University of Nairobi is now only ten years old, having admitted its first students in 1967. In the previous two years by arrangement with the then University of East Africa in Kampala, Kenyatta National Hospital in Nairobi had had the opportunity to organise and undertake clinical tuition of medical students from Makerere, ranging from the third year to the fifth and final year, for periods of up to one academic year of their undergraduate studies. As there was no Faculty of Medicine in the University College, Nairobi, at that time, this exercise was undertaken by the Ministry of Health, without the academic attainment of the students being adversely affected. The establishment of the new medical school resulted more from the initiative of the Ministry of Health than from that of any other department.

3. When the Faculty of Medicine eventually came into existence, the University planners were well-motivated in their formulation of curricula and programmes of training, and took into account requirements specifically aimed at health services in a tropical African developing country like ours. Study of some of these subjects of peculiarly local importance, although not emphasised in metropolitan countries can be undertaken to the same academic pitch as is required for any subject in the universities of the world. Of particular significance in this context, the medical course was to be of more practical nature, with students starting to apply the theoretical knowledge learned at an early stage in their five-year course. Pre-clinical sciences and clinical subjects are studied together for longer periods, overlapping during the middle years of the course. Another significant innovation was the three month assignment of students to a 'training district' in the rural areas, where they participate in health centres' activities and also undertake applied research on selected health problems in a rural setting. This is part of the training in the Department of Community Health of the Faculty, which also increased the content of the behavioural sciences in the course programme.

4. Students are admitted into the medical course on successfully passing their East African Advanced Certificate of Education (EAACE) which is the equivalent of the GCE Advanced level, and the undergraduate course lasts five years. Starting with a first-year class of 27 students in 1967, admission rose to 105 new students per year by 1972. It is proposed to raise this first year intake to 125. Some of the first graduates of this medical school (in 1972) have already gone through their postgraduate degrees and early indications of evaluation of their work are tending to support the efficiency of this training.

5. Meanwhile, during the last three years, in close consultation with the Ministry of Health, the University of Nairobi has started degree courses for dental surgeons (BDS) and pharmacists (B.Pharm.) within the Faculty of Medicine. At present the annual intake to each of these courses is 30 students. There is also training for BSc Anatomy.

6. Postgraduate courses have been instituted for the degree of Master of Medicine (MMed) in general medicine, surgery, obstetrics and gynaecology, paediatrics and child health, and radiology (1977). Postgraduate training is carried out locally in pathology, dermatology and anaestheology, but candidates obtain their degrees abroad. There are postgraduate programmes also for the degrees of Master of Science (MSc), Doctor of Philosophy (PhD) and Doctor of Medicine (MD).

7. These developments have taken place in close collaboration with the Ministry of Health, and the courses done locally are important since they retain the talent of these postgraduate students within the service.

8. The Faculty of Medicine, with assistance from WHO, has undertaken the course for the Diploma in Advanced Nursing. It has also assisted in curriculum development and final examinations for laboratory technology.

Health services and the development of medical sciences

9. A developing country like Kenya can ill afford the luxury of rigid compartmentalisation of the use of meagre resources, from the same Treasury, in a field like health. Both the Ministry of Health and the University Faculty of Medicine are at one in giving the required health service to the people. The slight difference in the role of each is in the loading of the delivery of health services, utilising available personnel and current knowledge, on the Ministry, and loading the training of doctors and research for new innovative knowledge and means to the betterment of health delivery on the University. There is no dichotomy in the service role to society of both institutions. This need not occur in a discipline like health because the study of medicine is at the hospital bedside and among the suffering community, and not merely in the lecture theatres and the library. In the teaching hospitals both the government consultants and the university professors have clinical as well as teaching responsibilities.

10. It is natural and beneficial that university professors should participate in planning and decision-making forums of the Ministry of Health, and this is a much valued practice in Kenya. Similarly, it is a service requirement for doctors in the Ministry of Health to undertake teaching of their junior staff and students, while it is also desirable that they should also carry out research on health subjects of their choice. In fact, the revitalised Kenya Institute of Medical Research is utilising expertise from both sectors.

11. The education and training of para-medical and auxiliary medical personnel is principally a responsibility of the Ministry of Health but, apart from the Advanced Nurse Training Department which is within the Faculty, only a few individuals in the Faculty show a fringe interest in this. Realising the essential value of these non-university-trained cadres of health staff, allied to medicine and the medical auxiliaries, to the wider coverage of the delivery of the health services, one would wish to see an increased interest on the part of the Medical Faculty in these para-medical courses.

8 November 1977

THE ROLE OF HEALTH MINISTRIES AND MEDICAL SCHOOLS

Background paper prepared by the Government of India

The Ministry of Health, Central or State, is the ultimate authority responsible for all the health services operating within its jurisdiction and has to lay down and enforce minimum standards of health administration.

2. The Union Ministry of Health gives advice on health and allied matters, co-ordinates health programmes and policies, supplies technical information and equipment, and provides financial and other assistance towards health measures. Thus it mainly guides, assists and co-ordinates, while State Health Ministries, Corporations etc., implement the relevant programmes and policies. The Ministry of Health formulates national policies on health with the assistance of expert committees etc.

3. Policies for the maintenance, expansion and improvement of medical education are laid down in the context of the need for trained medical manpower, and in that context the capacity has been built up since independence, when there were 25 medical colleges, to 106 medical colleges today with an annual admission of over 12,500 students. The undergraduate medical curriculum has been restructured from time to time as a result of recommendations of various conferences of experts held to deal with the problems of medical education in the context of the needs of the country and various development programmes. The Medical Council of India is a statutory body under the Central Ministry of Health and Family Welfare (Department of Health) which lays down recommendations on curriculum, standards of education, examination, teachers, etc., for medical education both at under-graduate and post-graduate level, and ensures its maintenance through periodical inspections. The Council also maintains a register of qualified medical practitioners. The Central Health Ministry is guided by the advice of the Medical Council of India in according recognition (or de-recognition) of qualifications awarded by various medical colleges in the country, and also of equivalent foreign qualifications.

4. The involvement of medical colleges in the delivery of health care was formerly limited in scope, confined mainly during the 12-month period of compulsory rotating internship of which a specified period was required to be spent in rural areas.

5. As a result of recommendations made by the Shrivastava Committee in its Report (1975), on which a plan of action was drawn by the Central Ministry of Health and which was approved at the third joint meeting of the Central Council of Health and the Central Council of Family Welfare in April 1976, the scope of involvement of medical colleges in the delivery of health care has been widened. Implementation of the programme is to be carried out by State and Union Territories administering the colleges, and for this purpose the central Ministry of Health has laid down guidelines which are briefly enumerated below:

(a) The government medical colleges in the State will accept total responsibility for promotive, preventive and curative health care of at least three community development blocks in the district where the medical college is situated, in the first instance, and will extend total health care to the entire district in which the medical college is located, in a phased manner over a period of 3–5 years.

(b) Each medical college will evolve, with the active involvement of district hospitals, *taluk* hospitals, sub-divisional hospitals and primary health centres, a well-knit referral service complex.

(c) For the proper training of the undergraduate students in the rural health care programme, a phased programme will be drawn up so that the students get the opportunity to spend part

of their training time in district and *taluk/tehsil* sub-divisional hospitals and primary health centres.

(d) The training of undergraduate medical students will be re-cast within the integrated comprehensive health services complex, making provision in the time-table for posting in the rural areas where they will be actively involved in the services provided by the primary health centres and sub-centres. During the undergraduate period of training at least eight weeks annual posting in rural areas will be provided in the time-table. Each medical college will evolve a detailed training programme for the undergraduate medical students as well as the interns, which they will carry out during their rural postings.

(e) For the successful implementation of the total health care and improved training programme for the undergraduate students, the staff members for the entire faculty will be posted at primary health centres and sub-centres by rotation for sufficiently long periods. There they will be responsible for guiding the training of undergraduate students as well as interns, and will supervise the development and implementation of the entire health care delivery programme. It will also be necessary to organise a re-orientation programme for faculty members and health team personnel at each medical college.

(f) The services of district health personnel, doctors working in district hospitals, *taluk/tehsil* sub-divisional hospitals, civil dispensaries and primary health centres will be utilised for organising the undergraduate training programme. They will be given appropriate teaching status in the medical college concerned commensurate with their qualifications and field experience.

(g) The entire period of internship training will be spent in suitably up-graded district hospitals, *taluk/tehsil* sub-divisional hospitals and primary health centres. Depending upon the availability of facilities at the district hospitals, the number of interns posted to the medical college hospitals will be reduced.

(h) The medical college staff will extend their services to the fullest extent in the training of para-medical and other ancillary health staff required in the development of the delivery of health care.

(i) It is essential to collect the base-line data about the health status of the community concerned so that the impact of the entry of the medical colleges in the health care delivery system can be evaluated periodically. The information will be collected in demographic data, family planning, maternal and child health, nutritional status, communicable diseases (especially tuberculosis, leprosy and venereal diseases), parasitic infestation and immunisation.

(j) Each medical college will evolve a scheme for health care delivery systems in depth for a population of about 30,000. The experience gained from these experimental models will be utilised in extending in-depth services for the rest of the area in future.

(h) In order to motivate the students to their whole-hearted participation in the rural posting, a scheme of periodical assessment of the studies will be built into the programme. At the university level, the examinations will be so structured that stress will be laid on the assessment of knowledge gained by the students during the rural posting.

(l) To bring about the far-reaching changes in the present system of medical education and the health care delivery system, administrative machinery will be evolved for co-ordinated efforts and for providing official support for the field programmes by constituting co-ordination committees at State level.

6. Since the involvement of medical colleges in the delivery of health care is to be implemented in a phased manner, during the first phase in 1977–78, 25 medical colleges have been selected for the purpose. The Government of India Ministry of Health will provide to each medical college covered under the programme financial assistance in the nature of a non-recurring grant-in-aid not exceeding Rs.5 lakhs per medical college for meeting part of the non-recurring expenditure. All recurring and non-recurring expenditure in excess of Rs. 5 lakhs will be the liability of the concerned State Government or Union Territories administration.

7. There are 106 medical colleges in the country. Strictly speaking, only one medical college is under the administrative control of the Central Ministry of Health (Jipmer, Pondicherry). The All India Institute of Medical Sciences, New Delhi, is a statutory body established under an Act of Parliament and is wholly financed by the Central Health Ministry. The Postgraduate Institute, Chandigarh, is also financed by the Ministry of Health. The Lady Hardinge Medical College and Hospital for Women, New Delhi, is an autonomous institution administered through a duly-constituted board of administration, and is also wholly financed by the Central Ministry of Health. The Armed Forces Medical College, Poona, is wholly administered and financed by the Ministry of Defence at the centre. Ten medical colleges are under private bodies. All the remaining medical colleges are under the direct control of State Government, Union Territories, universities or local bodies.

8. Health *per se* – and so also undergraduate medical education – is a subject in the State sector. Maintenance of a uniform standard of medical education is ensured by the Medical Council of India which is a statutory body under the Central Ministry of Health.