Competent health personnel are the key to achieving the goal of health for all by the year 2000. Countries must be able to prepare adequate numbers of health personnel to implement their national health policies and to provide them with appropriate training for the tasks they are expected to perform. This paper reviews the progress achieved in this area, examines some of the problems and recommends action for the reorientation of health personnel in the Western Pacific Region.

The Committee's attention is also drawn to resolution WHA40.14 on the promotion of balanced health manpower development, adopted by the recently concluded Fortieth World Health Assembly. This resolution is appended as Annex 1.
1. CONCEPTS AND NEEDS

The production of appropriate categories of health personnel, adequate to the task of achieving health for all by the year 2000 through primary health care, calls for a number of policy decisions to be made by health institutions. It is important that the health authorities, in cooperation with other institutions and bodies able to influence the training and utilization of health manpower, should carefully review their mission and critically examine their present and future responsibilities in order to respond to the rapidly changing socioeconomic environment.

The general guiding principle in health manpower development is to satisfy the health needs of the entire population through the services of health personnel adequately trained for this unique mission. For the first time in the history of modern public health, a hierarchy of goals has been defined: satisfying the health needs of the entire population; developing health systems to satisfy those needs; making available human resources to staff the health systems. Achievement of these goals is only possible through integrated health systems and manpower development policies capable of dealing with issues of relevance in providing health care services.

Reorientation of health personnel is a complex political and managerial process. Because of the many factors involved, implementation is generally slow and further complicated by intersectoral relationships. Despite continuous efforts by WHO and Member States, problems remain in the process of reorienting health personnel towards the new tasks of primary health care.

Some countries have experienced the problem of overproduction of medical doctors while others are faced with a shortage of human resources for health, resulting in the need to produce additional numbers of health personnel. In both developed and developing countries in the Region, there has been a problem of maldistribution with most of the doctors concentrated in towns leaving the rural periphery underserved. In some countries the trend towards narrow specialization continues, resulting in a lack of medical practitioners in primary health care institutions. Most of the training programmes are still curative-oriented and hospital-based, utilizing sophisticated medical technology that is not cost-effective.

The recently concluded Fortieth World Health Assembly examined some of the problems related to imbalances in health manpower development and adopted a resolution in this context, which is attached as Annex 1.
2. PROGRESS

2.1 Trend assessment

The landmark Conference on "Future health and medical manpower: New strategies in education for the XXIst century", held in Tokyo in 1985, affirmed that the reorientation of health systems towards primary health care and social equity could best be achieved through a fundamental reorientation of health manpower planning, production and management. Innovative efforts would be needed to obtain systematic information for future development, to define new responsibilities among health care institutions, and to establish appropriate mechanisms for managing change in the light of political and socioeconomic circumstances and community health needs.

Since the Declaration of Tokyo, there has been an overall positive drive towards the reorientation of human resources for health in the Region. National and international efforts have focused on promoting a number of strategic initiatives.

2.2 Policies

The Declaration of Tokyo has had its greatest impact in the area of reformulation of national policies for human resources for health.

The need for and acceptance of change at the central level and in the work of educational and training institutions, including the reallocation of resources and closer linkages with the community and health care delivery systems, have characterized developments in the Region. Several national conferences\(^1\) have been organized and supported by WHO, which recommended country-specific actions for the reorientation of national policies. The Technical Discussions held in conjunction with the thirty-seventh session of the Regional Committee in 1986 also discussed the topic of "Health manpower for the twenty-first century" and approved the need for reorientation of health personnel training, which should be relevant to priority health care needs and include all categories of health care workers.

\(^1\) New Zealand, October 1985; the Philippines, February 1986; Australia, June 1986; Japan, June 1986; Malaysia, July 1986; China, November 1986 and Republic of Korea, June 1987.
More specifically, about half the countries in the Region have developed new health manpower policies for at least one category of health personnel. A series of national workshops was organized to deal with policy issues. At the international level a workshop on management of change in training institutions was conducted at the WHO Regional Teacher Training Centre in Sydney in 1986, bringing together high-ranking officials and decision makers.

Reorientation of nursing education was also re-emphasized and WHO expanded its technical support to countries with a view to making nursing education curricula correspond more closely to primary health care needs. Continuing education for the reorientation of practitioners to primary health care tasks was initiated or sustained in a number of countries.

A number of governments and training institutions have initiated changes in health manpower policies by contributing complementary resources, identifying present and future health needs for the appropriate health care system, coordinating health manpower planning and production with health systems development and establishing career development opportunities.

2.3 Health manpower planning

Undoubtedly, this is the most difficult of the processes involved in overall human resources development. Lack of it leads to all kinds of imbalances in supply, demand, distribution, quality and quantity of health personnel and affects the managerial capacity of the countries to make cost-effective use of available and projected human resources. It has become increasingly clear that the health manpower planning pattern must be determined by what countries really need and can afford and not by what various pressure groups may demand.

More than half the countries in the Region have continued to improve and implement their health manpower planning. Comprehensive country reviews were carried out in several countries (Malaysia, New Zealand, Philippines, Republic of Korea, Viet Nam) to identify priority problem areas and make practical recommendations for improvement. Activities conducted by the National Centre of Human Resources for Health in Viet Nam, as well as a series of national workshops (Lao People's Democratic Republic, Papua New Guinea, Republic of Korea, Viet Nam) have also dealt with practical issues of health manpower planning.

In the Philippines, a study carried out in collaboration with WHO made it possible to improve practical methods of forecasting health manpower needs and to develop guidelines for human resources planning. The Lao People's Democratic Republic continued to make use
of an extensive inventory of national health personnel and their job descriptions in establishing a national programme on continuing education. In Malaysia, a computerized inventory of certain health professionals has also been used in making realistic manpower projections and establishing monitoring systems.

2.4 Health manpower training

Although reorientation of health personnel has been a fundamental policy of WHO for the attainment of health for all through primary health care, this will only be achieved if educational and training institutions design curricula that are responsive and relevant to community health needs and problems. Reorientation also implies changes in attitudes and concepts. Future health personnel need to learn medical practice in an environment closely resembling that in which they will work after graduation.

Health manpower training must be planned not according to some arbitrary ratio of a given grade of manpower to the population but according to how a given socioeconomic system will utilize available health personnel and what such personnel will be able to do to demonstrate that the national health policy objectives are being achieved. Above all there is no point in planning changes unless decision makers are willing to take the necessary action to implement them.

Reorienting educational and training institutions by redesigning curricula on the basis of community- and problem-oriented teaching/learning methodology and implementing continuous teacher training activities have been the main thrusts of national human resources development programmes. Specific country activities have centred around three areas: curriculum planning and development, teacher training strategies, and production of relevant health learning materials. Thus, the problems constantly dealt with have been what to learn to be relevant and how to organize learning for it to be effective.

Most of the countries have continued to reorient the curricula of educational and training institutions to align them more closely with the concepts of primary health care. Activities related to job description, task analysis, curriculum planning and design for various categories of health personnel were intensified, and studies were conducted to ensure that learning was relevant to priority health care problems. Such activities were implemented, for example, in China, the Lao People's Democratic Republic and Viet Nam, where national teacher training workshops have stimulated systematic educational planning and development. In Fiji, the curricula for nurses, health inspectors and dental therapists were reviewed while efforts were made to establish community-oriented and based educational programmes in the University of the Philippines College of Medicine.
Activities at the Regional Teacher Training Centre and national teacher training centres focused on the reorientation of teachers towards primary health care, production and dissemination of health learning materials, development of effective education methodologies and students' performance assessment. In the Philippines, the National Teacher Training Centre started a master's programme in health personnel education, while the Regional Teacher Training Centre conducted an international workshop on implementation of innovations in medical education to improve participants' abilities and skills in using appropriate innovations, with particular reference to reorienting curricula to primary health care and designing effective teaching/learning experiences.

In the area of health learning materials development and production, a training module bank was established in the Philippines with a view to serving national needs and exchanging modules with other training institutions in the Region for nursing education and training of other categories of health personnel. In Fiji, Papua New Guinea and Viet Nam, capabilities for health learning materials development and production were developed or upgraded.

Emphasis in nursing education has been on the impact of nursing activities in health care development with particular reference to primary health care. Most countries are in the process of reorienting nursing education and upgrading services in the light of needs and medical advances. A regional workshop on the role of nursing in primary health care, held in Manila in December 1986, reviewed the roles of nurses in the Region and identified possible efforts to be made in countries for the better utilization of nurses. Technical support was provided to a number of countries such as the Lao People's Democratic Republic and Tonga in strengthening public health nursing education and practice. In China progress was made in the development of the National Nursing Centre and a national seminar was held on nursing education, curriculum development and instructional design for senior nurse teachers.

2.5 Health manpower management

Manpower management has been defined as the mobilization, motivation, development and fulfilment of human beings in and through work. Excellence in management is broadly determined by the managerial process (techniques), management support systems (information) and managerial styles (behaviour). In the health care sector, it is a relatively new field. It depends centrally on the exercise of interpersonal influence, leadership skills, acceptable employment practices, continuous staff development and training, and healthy management/staff relations through which problems get solved, necessary organizational changes are brought about and outcomes are evaluated.
Generally, countries have shown increased interest in management training. The main trends have included provision of training in specific skills and techniques of the managerial process for national health development, development of training programmes in communication skills to manage people effectively, and incorporation of management training in the curricula of educational institutions for health personnel. Efforts have been made to initiate a long-term programme on health manpower management systems in the Regional Office aimed at upgrading national capabilities in this relatively new field of human resources for health development.

2.6 Health manpower research

There are two questions of practical importance. How many health personnel of different categories does a given country really need, now and in the future? What proportions of such categories will ensure the best operational mix for cost-effective health care within a country's given socioeconomic setting? The answers to these questions should be provided by health manpower research aimed at measuring the determinants of effective health care provision and the degree to which health development plans are integrated into the overall socioeconomic development plans.

It is in this area of an overall human resources development system that progress is needed to determine the distribution patterns of health personnel, both quantitatively and qualitatively, their performance standards, and the multifactoral causes that hinder human resources development. Efforts have continued to be made, both at Regional Office and country level, to intensify monitoring and evaluative research activities to assist health leaders and health care managers in the planning, production and utilization of health manpower. In the Republic of Korea, WHO has continued to support research on the proper combination and deployment of medical and health personnel while in the Philippines a national study was conducted to assess the present status of medical education and to set directions for its future development.

3. PROBLEMS

Reorientation of health personnel in order to meet primary health care needs and implement new education strategies for the twenty-first century has come up against various obstacles. Perhaps the most deeply rooted problem is the resistance-to-change syndrome. Broadly speaking, there are two kinds of constraint contributing to the resistance-to-change syndrome: political (intersectoral), where policy decision-making has been sometimes beyond the control of the health care administrator, and managerial (intrasectoral), where attitudinal conflicts, organizational imbalances and technological difficulties have adversely influenced policy formulation, planning, training, management and research processes. These constraints have further triggered a chain-reaction of country-specific implementation problems.
More specifically, there has been a lack of cohesiveness and understanding among medical educators regarding the need to reorient existing health and educational systems towards primary health care and produce new types of health workers with different skills, attitudes and motivation.

Perpetuating itself is the imbalance between the need for high technology in medical sciences and appropriate medical technology that countries can afford to meet community health care needs and problems. Many training institutions and medical schools have been trying to maintain or upgrade at all costs their academic standards by developing and using sophisticated medical technologies for their professional satisfaction.

Resistance to change in educational and training institutions has suppressed innovative ideas in educational planning, curriculum design and teaching-learning methodology. The professorial elite resist radical change because they truly believe that what they have been doing for decades and the way they were taught in their time are still better and safer. In some cases, the students also may resist innovative approaches to their own way of learning just because they are not used to them and also because they prefer the safer and less demanding course of listening to what professors say.

Training institutions also lack sufficient information about community health needs and problems, which contributes to their independent stance in deciding what they are going to produce and what skills the graduates will acquire. When training institutions do accept innovations in health manpower training and are ready to implement some, there is insufficient feedback, particularly as to how innovations have been implemented. Sometimes the material or financial resources needed to introduce innovative educational technologies and adequate health learning materials are lacking.

The population also is becoming more demanding as to the kind of services provided as people become more educated. There is a growing tendency to consult specialists directly, by-passing primary health care centres and making it difficult for medical students to see the emphasis being given to primary health care and its role in providing essential services at affordable rates.

It is also true that some primary health care facilities are unable to compete with a modern teaching hospital in providing the necessary stimulus. There are few medical schools that not only advocate but also actually practise community-based education of health personnel. A number of training institutions make use of government primary health centres for students to practise in. In many instances, however, students are so discouraged by the poor facilities, lack of staff, inadequate quality of services and low morale of health workers, compared with the situation in teaching hospitals, that it is really difficult to motivate them to study and practise primary health care.
4. ACTION RECOMMENDED

The reorientation of health personnel for carrying out the tasks of primary health care should be part of a long-term action-oriented national programme, the implementation of which will undoubtedly require major policy decisions on making national integrated health systems and manpower development programmes fully operational. This will necessitate a comprehensive situation analysis concerning the feasibility of policy changes at the present stage and the ways and means of implementing them (See Annex 2 attached).

The crucial issue is the extent to which reorientation of health personnel will be able to solve the cardinal question of relevance in planning, training and managing human resources in order to meet community health needs and solve priority problems. What are the categories and numbers of health personnel that a given country should invest in, cost effectively, to ensure achievement of national health-for-all policy goals based on primary health care? In health manpower planning, therefore, the emphasis should be on reformulating national policies and redefining the new roles of health teams and the categories of health professionals in each of them.

Intrinsically related to policy decisions on the above and health manpower planning indicators is the process of reorienting national educational and training institutions to bring them closer to priority health problems. In health manpower training, therefore, efforts should be directed to bringing about change in educational systems by defining selection criteria, evaluating educational and training programmes for relevance, providing training for future members of multiprofessional health teams, and designing continuing education programmes. One of the most promising strategies would be to introduce as widely as possible a community-based education programme for health personnel, taking the practical steps recommended by the WHO study group on community-based education.1 The most important issues to be considered include coordination between the health and educational systems, intersectoral approaches, community involvement, the health team approach, competency- and problem-based education and valid performance assessment.

The integration of the health and education systems in a coherent whole should be facilitated by introducing and strengthening as early as possible health manpower management systems to ensure the rational and effective utilization of human resources for health. In health manpower management, therefore, priority should be given to

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establishing management infrastructures, designing health manpower information systems, formulating new job descriptions, career structures and performance standards, and developing human relations, communication skills and supervision.

To ensure the harmonious integration of the health system and health manpower development process, health manpower research should be initiated and promoted as widely as possible.

Thus countries should be urged to change as soon as possible their national policies for human resources for health development by reorienting all categories of health personnel towards primary health care and community needs through designing integrated health and manpower development systems based on sound planning practices, relevant training activities, effective management information systems and continuous evaluative research programmes.

WHO will continue to collaborate with Member States by providing technical, developmental and promotional support and by disseminating relevant information among national health authorities and training institutions concerning successful experiences and innovations in reorienting health personnel to meet the goals of health for all through primary health care.
PROMOTION OF BALANCED HEALTH MANPOWER DEVELOPMENT

The Fortieth World Health Assembly,

Having considered resolution EB79.R16 and the highlights of the conference sponsored by the Council for International Organizations of Medical Sciences (CIOMS) on health manpower out of balance;¹

Aware that health manpower development appropriate to people's health needs and social and economic circumstances is essential for the attainment of health for all;

Concerned that, while shortage of certain categories of health manpower is still a problem in many countries, an increasing number of Member States have an over-supply of certain categories of health professionals, such as physicians and dentists, leading to their under-utilization, unemployment and migration to other countries;

Recognizing that over-supply of manpower is only one manifestation of health manpower imbalances, which include discrepancies between, on the one hand, the quality, numbers, types, functions, and distribution of health workers, and, on the other, a country's needs for their services and its ability to employ, support and maintain them;

Recalling that imbalances in health manpower exist in many countries and are due to socioeconomic and political factors, and to a failure of manpower planning, and therefore urgent preventive and corrective actions are needed by Member States in order to cope with current economic stringencies and not to retard the attainment of health for all;

1. THANKS the Government of Mexico, its various agencies, CIOMS and the other nongovernmental organizations which co-sponsored the conference for their material and technical support;

2. URGES Member States:

   (1) to undertake, as a matter of priority, the strengthening of their health manpower policies and systems, including manpower planning, and ensure that they respond fully to the strategies for the achievement of health for all through primary health care;

   (2) to develop sufficient relevant demographic information about health manpower, a set of reliable and realistic country specific criteria and indicators based on accessible data, and appropriate mechanisms to identify and monitor changes according to the actual needs of countries;

   (3) to reorient or, as appropriate, encourage reorientation of education and training of health manpower to respond fully to local needs in the light of integrated development of health systems and manpower;

   (4) to ensure that manpower is not only adequately planned for and trained, but also skilfully managed, including the improvement of career development and incentive schemes, to ensure its most effective utilization;

(5) to employ measures urgently, when actual imbalances exist or occur, to adjust the production of health manpower in order to bring the supply and distribution into line with expected future demand for services, bearing in mind the country's ability to support such services;

(6) to take steps, where necessary and appropriate, to extend or complete the coverage of their health services to meet the needs of the entire population;

3. REQUESTS the Director-General:

(1) to cooperate with Member States in strengthening their health manpower systems, including manpower planning, consistent with the strategies for health for all;

(2) to promote urgent research into the fast-growing problem of health manpower imbalances and the exchange between Member States of relevant information and indicators concerning such imbalances;

(3) to intensify efforts to cooperate with all relevant national and international agencies and organizations to stimulate awareness, promote balanced health manpower development, and encourage prompt measures to deal with imbalances when they arise.

Eleventh Plenary Meeting, 13 May 1987
A40/VR/11
Flow chart for analysing the process of reorienting health personnel

- Change policy target
  - Change achieved?
    - Yes: Evaluation, motivation, remuneration
    - No: Analyse obstacles
      - Analyse obstacles:
        - e.g. VALUES
        - ORGANIZATION
        - RESOURCES
        - MOTIVATION
        - TRAINING
        - Research needed?
          - Yes: Analyse obstacles to using knowledge
            - e.g. RESISTANCE TO CHANGE
            - VESTED INTERESTS
            - POOR COMMUNICATION
            - RIGID ORGANIZATION
          - No: Finish
        - No: Finish
  - Yes: New change in policy needed?
    - Yes: Analyse obstacles
      - Analyse obstacles:
        - e.g. VALUES
        - ORGANIZATION
        - RESOURCES
        - MOTIVATION
        - TRAINING
        - Research needed?
          - Yes: Analyse obstacles to using knowledge
            - e.g. RESISTANCE TO CHANGE
            - VESTED INTERESTS
            - POOR COMMUNICATION
            - RIGID ORGANIZATION
          - No: Finish
        - No: Finish
    - No: Analyse success stories

Plan for generating knowledge
- What
- Who
- How
- Where
- When

Identifying the minimum path to attain the target