WHO Technical Report Series

861

INTEGRATION OF
HEALTH CARE DELIVERY

Report of a
WHO Study Group

World Health Organization

Geneva 1996

The World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full. Applications and enquiries should be addressed to the Office of Publications, World Health Organization, Geneva, Switzerland, which will be glad to provide the latest information on any changes made to the text, plans for new editions, and reprints and translations already available.

© World Health Organization 1996

Printed in Switzerland

Contents

WHO Study Group on Integration of Health Care Delivery

Geneva, 18–24 October 1994

Members

Mrs I. T. Kamal, Defence Housing Authority, Karachi, Pakistan (*Vice-Chairman*)

Dr J. Kumate, Minister of Health, Ministry of Health, Mexico (*Chairman*)

Dr S. L. Leimena, Director-General of Health, Ministry of Health Department of International Affairs, Jakarta, Indonesia

Dr K. Leppo, Director-General, Department of Social and Health Services, Ministry of Social Affairs and Health, Helsinki, Finland

Dr E. T. Maganu, Permanent Secretary, Ministry of Health, Gaborone, Botswana

Professor L. Malcolm, Department of Community Health, Wellington School of Medicine, Wellington South, New Zealand

Mrs H. Matanda, Permanent Secretary, Ministry of Community Development and Social Services, Lusaka, Zambia

Professor P. Mercenier, Unit of Research and Education in Public Health (URESP), Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium

Dr E. Quamina, Cascade, Port of Spain, Trinidad and Tobago (*Rapporteur*)

Dr M. Roxas, Deputy Minister of Health, Department of Health, Manila, Philippines

Representatives of other organizations

Churches's Action for Health
Dr R. K. O. Asante, Executive Secretary, Churches's Action for Health, World Council of Churches, Geneva, Switzerland

United Nations Children's Fund
Dr K. A. Pangu, Senior Adviser, Health Systems Development, Bamako Initiative Management Unit, United Nations Children's Fund, New York, NY, USA

World Vision International
Dr E. Ram, International Health and International Relations, World Vision International, Geneva, Switzerland

Secretariat

Dr G. L. Dorros, District Health Systems, Division of Strengthening of Health Services, WHO, Geneva, Switzerland (*Secretary*)

Dr J. J. Macdonald, Director, Education for Primary Health Care Unit, School of Education, Centre for International Studies, University of Bristol, Bristol, England (*Temporary Adviser*)

Dr E. Tarimo, Director, Division of Strengthening of Health Services, WHO, Geneva, Switzerland

1. Introduction

A WHO Study Group on Integration of Health Care Delivery met in Geneva from 18 to 24 October 1994. The meeting was opened by Dr J.-P. Jardel, Assistant Director-General, on behalf of the Director-General of WHO. Noting the current unprecedented socioeconomic and political changes in the world, Dr Jardel said that countries faced with a critical shortage of resources are open to new solutions and new ways of thinking. There are opportunities for innovation and rethinking of old assumptions about the management and organization of health care systems. The challenge facing countries is to develop a sustainable health infrastructure which will provide health care in an integrated way.

The current trend towards democratization, decentralization of power from national to local authorities and increased emphasis on human rights issues encourages the integration of health care delivery. However, there are also negative factors which limit the degree of integration that is possible in a given country. The adoption of open-market economic policies has initially led to greater fragmentation of services in many countries. Within the health sector, the influence of bilateral and multilateral donor agencies on the allocation and use of national health resources has often emphasized certain priorities without taking into account health problems in different local contexts. In this way, the donor community has inadvertently helped to make the national health system dependent on external resources. Other relevant issues include frequent changes in public health slogans, priorities and policies by the dominant international agencies, and new public health initiatives such as "selective primary health care" and "health intervention packages" which often confuse national health administrators and may dilute national efforts.

The concept of the district health system has been accepted by almost all countries as a framework for the promotion of integrated health care, but it has not yet been widely implemented. Dr Jardel called upon the Study Group to identify the opportunities presented by the district health system for the future development of integrated health care delivery and to draw up a model of an integrated health care delivery system and a plan of action.

1.1 Background

People throughout the world want access to health care. They want their health problems solved as quickly as possible using the best technology available. One of the dilemmas that countries, WHO and other agencies face in trying to meet these aspirations is whether they should seek to control or eradicate individual diseases or problems or instead tackle health problems on a broader front by means of multipurpose programmes with wide-ranging objectives. In this report, the terms "vertical" or "categorical" programme have been used for the first

approach, and the term "integrated health care delivery" for the second approach.

Between the mid-1950s and the mid-1960s, vertical programmes were organized to apply the knowledge gained from recent scientific advances to the control of malaria, smallpox and sexually transmitted and other diseases. A WHO Expert Committee on Public Health Administration in 1954 (*1*), and a WHO Study Group on Integration of Mass Campaigns Against Specific Diseases into General Health Services in 1965 (*2*) reviewed global experiences of both the "vertical" and the "integrated" approaches to the delivery of health care. The vertical approach produced tangible results in a short time, but these achievements were often not maintained in the long term. The integrated approach was more sustainable, efficient and convenient for users. The Study Group emphasized the importance of establishing basic health services to meet the everyday needs of a wider population. In 1978, the International Conference on Primary Health Care in Alma-Ata launched the primary health care (PHC) approach, which aimed to mobilize individuals and the health and other sectors to ensure that essential care would be available to all by the year 2000 (*3*). The PHC approach thus broadened the challenge of "integration" from that of bringing together tasks and functions *within* health services to mobilizing health-related activities in other sectors, as well as the activities of families and communities, and linking them with health services.

The global economic recession set in immediately after the Alma-Ata conference and made the implementation of PHC very difficult, particularly in poorer countries. The integrated PHC approach was seen in some circles as being too ambitious. A "selective PHC" approach was strongly advocated, in which the global community and countries would concentrate on the small number of diseases for which cost-effective tools were available (*4*). For other diseases, such as cancer, diabetes and African trypanosomiasis, efforts should focus on finding cost-effective tools.

In 1984, WHO organized a consultation to analyse country experiences in dealing with these issues and to provide guidance for future action. The participants concluded that a confrontation between the vertical and the integrated approach was counterproductive. They noted a move in all countries towards integrated approaches. They also noted that a number of programmes, particularly maternal and child health (MCH), were serving as the entry points for integrated delivery of health care in a number of countries. The report of the consultation (*5*) made recommendations for follow-up action by countries and WHO.

The context in which health care is being delivered has changed dramatically since the 1980s. The almost universal introduction of major health and political reforms, characterized by expansion of the market economy, privatization of government services, and democratization and decentralization of political and administrative processes, has created

2

a turbulent and uncertain environment for the development and management of health services. Issues of efficiency, quality of care, cost-containment, consumer choice and accountability are in the forefront. There is also a rapid health transition in developing countries, characterized by the aging of the population and the increasing importance of chronic diseases as causes of morbidity and mortality. New tools have also been developed to help poor countries to select health interventions (6). Despite the widespread concerns with priority-setting and improving the performance of health systems, a number of important issues, particularly equity and integrated delivery of health care, remain neglected.

Governments and WHO have an important role to play in ensuring that health reforms are designed to increase participation, integration and equity, the goals of the health-for-all ideal. Many questions remain unresolved, for instance how the various interventions can be delivered in a cost-effective and complementary way which is convenient for users. While few countries may have clear national strategies for ensuring that health care is integrated and comprehensive, there are many experiences from which lessons can be drawn. However, a reappraisal of integrated delivery of health care is essential in the face of current health care trends.

2. Objectives of the Study Group

The objectives of the Study Group were:

- *To review, analyse and compare* successful and innovative experiences of countries in the development of integrated health care systems, particularly at district level (see Annex 1).
- *To identify major issues* which need to be addressed, including gaps in the approaches adopted by countries.
- *To propose a model* of a functional integrated health care delivery system, a *strategy* for countries to adopt, and *recommendations* to WHO on how to support these efforts.

While the Study Group's main concern was the situation in the developing and least developed countries, it also examined global experiences of integration and concluded that many solutions have a global application. The district health system was considered the most appropriate setting for an analysis of problems related to integration. As the district health system is a part of the national health system, any solutions to the problems identified and the issues raised will need to be applied at the level of the national health system.

3. Framework for analysis of integrated health services

3.1 Definition of integrated health services

Integration has been defined in *functional* terms as a series of operations concerned in essence with the bringing together of otherwise independent administrative structures, functions and mental attitudes in such a way as to combine these into a whole (2).

However, the expression "integrated health services" has also been defined in *organizational* terms as those services necessary for the health protection of a given area and provided under a single administrative unit, or under several agencies, with proper provision for their coordination (1).

Intersectoral collaboration leading to integration is easier at local and district levels than at higher levels (i.e. provincial or central). Integration is a way of optimizing the use of scarce resources and responding more effectively to people's needs. By improving efficiency and effectiveness and with the involvement of education and other social services, integration aims to increase consumer satisfaction with the health services.

Integration is not a strategy to fall back on when vertical programmes run out of funds, nor is it achieved by adding to the responsibilities of service providers without a corresponding increase in resources. It is not a panacea.

Integration does not mean that specialized disciplines, programmes, personnel and services will be abolished. It does not necessarily mean that all services will be provided by multipurpose workers. A rational referral system implies the need for specialists at secondary and tertiary levels; where resources permit, some specialization may be appropriate at the primary health care level.

The Study Group defined integration of health services as the process of bringing together common functions within and between organizations to solve common problems, developing a commitment to shared vision and goals and using common technologies and resources to achieve these goals. The aim is to promote primary health care services which are fully integrated under the management of a district health team, led by a district health manager, in order to make the most efficient use of scarce resources.

3.2 Advantages and disadvantages of integration

From the success stories related by the participants, it appears that the success or failure of integration will depend on the attitude of service providers, who will need to pool resources, show unity of purpose and give up some of their territorial rights. It was also emphasized that integration will require close coordination between individuals, departments and sectors.

Experience has identified some important advantages and disadvantages of integrated health care delivery. A comparison of the advantages and disadvantages of vertical programmes and integrated health care services is shown in Table 1. Issues pertaining to the integration of health services with other sectors are not shown in the table but are dealt with in section 6.3.6, "Multisectoral integration". Table 1 clearly shows that integration is a means of bringing together resources and activities, where feasible, to respond effectively to local needs and use resources efficiently. A local health service can, therefore, continue to have vertical or special programmes where and when the situation requires them but, at the same time, it should be an integrated service with the capacity to sustain the activities of the vertical programme in the long term. The two approaches are not mutually exclusive, but complementary.

In addition to the advantages listed in Table 1, the integration of health care delivery may well lead to other benefits for the health care system. For example, the services are more likely to be sustainable in the long term, while vertical programmes are often effective for only a limited period. Thus there is potential for improvement in a wide range of health status indicators over many years. Increased community involvement in integrated services is likely to lead to greater overall satisfaction with those services. Furthermore, integration normally reduces differences in the access and utilization of services between geographical and socioeconomic groups, leading to greater equity in health care. Such factors will inevitably make it easier to implement health development strategies in the future, since they will take place in a fully integrated service instead of being tacked on to a fragmented set of programmes.

3.3 Examples of integration

Integration of health services can have several elements, which together build up a picture of the overall extent of the integration. The various elements of integration cover several important areas.

* Integration of *service tasks* within a given setting involves:
  - multipurpose clinics providing general primary care together with antenatal and infant care, instead of special-purpose clinics;
  - multipurpose staff, e.g. nurses capable of both MCH care and communicable disease control activities, instead of specialized staff for each function;
  - integration of certain service functions previously confined to specific service facilities or levels, e.g. providing primary preventive and outreach services from hospitals.

* Integration of *management and support* functions relates to:
  - planning, e.g. comprehensive, intersectoral planning and development of programmes, rather than separate planning of single-purpose programmes;

Table 1
Advantages and disadvantages of vertical programmes and integrated health care

Vertical programmes	Integrated health care
Advantages	**Advantages**
May set clear objectives and targets which motivate those working on the programme.	Allows delivery of a range of services selected to suit national health policies and local needs.
Operational planning of activities may lead to more efficient and effective delivery of the service.	Incorporates inputs from different components of the health system and thus reflects the multidimensional concept of health.
May provide performance incentives leading to higher quality of care.	Has the capacity to take on new activities and react to disasters.
Ability to monitor the restricted outputs and outcomes related to the programme may improve identification and resolution of problems.	Allows multipurpose use of resources, such as personnel, and allows more outputs to be achieved for a given input.
	Allows planning and management of area health services according to local circumstances with appropriate political, intersectoral and community involvement.
Disadvantages	Makes it easier to respond to user needs, which saves time, and encourages personalized service and continuity of care and thus increases convenience and user satisfaction.
May concentrate resources on a limited range of problems, detracting from development of comprehensive health systems.	Allows a more holistic approach to health, centred on the health needs of individuals and communities.
Heavy dependence on donor funding with consequent sustainability problems and vulnerability to changing fashions in donor policy.	**Disadvantages**
Single-purpose structure parallel to the general health service, with budgets controlled and targets set from above rather than by area health authorities.	May fail to set appropriate priorities.
May overload grassroots health services with many uncoordinated tasks, training programmes and reporting systems, usually determined by the central level of the health system.	May fail to adopt a programming approach, with clearly defined objectives, targets, operational planning and monitoring by outputs / outcomes.
May fail to mobilize sustained political and community support because intervention is imposed from above.	May fail to achieve the levels of output and impact in key health care areas that would be reached by single-purpose programmes.
Cost-effectiveness may reduce as time goes on.	May cause uncertainty and dissatisfaction among health service employees if adequate explanations and reassurances are not given.

- budget and financial processes, e.g. a budget structure that allocates resources to multipurpose PHC programmes, rather than to special-purpose services and projects;
- information systems which include data on both inputs and outcomes, report on all services delivered, record health status in the district and are used at district level as a management tool;
- training, e.g. in-service staff training designed to upgrade staff skills in several areas of service responsibility, including communication skills, and in a single course rather than many short, specialized courses;
- supervisory visits that are multipurpose and deal with all elements of the service;
- research, e.g. overall health systems research needs and proposals that are planned comprehensively, instead of investigators and institutions planning and conducting their research independently of each other and of defined national research priorities.

- Integration of *organizational components* requires:
  - integration of the efforts of different resource providers (government, private, nongovernmental organizations) operating at various administrative levels (community, district, provincial, national) through coordinating mechanisms such as health committees or councils;
  - making the district hospital an integral part of the district health service instead of a discrete institution, so that the district hospital serves not only as a referral centre but as a resource for support services;
  - integration of health and other development efforts across several sectors, e.g. joint efforts to support development of health care, education, transport, communications, housing, water, small business and agriculture;
  - integration of health care into community and family activities, e.g. involving communities and their organizations in defining health needs, health care planning and fundraising and interlinking their efforts with the formal health services.

4. Evolution towards integration

The purpose of this section is to identify the trends and factors that have influenced certain developments in health services in order to identify the critical elements which may influence future efforts towards integration.

The evolution and the current state of health systems shown in Table 2 have been influenced within countries by the political, social and economic context, and internationally by the collective values and practices of the health professions reflected in the policies of international organizations and donor agencies.

Table 2
Evolution of health care delivery systems towards the year 2000

	Before basic health services	Basic health services[a]	Primary health care
1. Concept of health care	Health care through medical facilities	Extension of coverage	Health for all by the year 2000
2. Objectives	Mainly care of the sick and response to widespread epidemics in some developing countries	Increasing emphasis on prevention of disease	A level of health for all that will permit individuals to lead a socially and economically productive life; greater emphasis on quality of life
3. Programme content	Largely medical care	Components of basic health services, with family planning services separate from maternal care and child health	Comprehensive care
4. Approach	Provider–recipient relationship	Increasing emphasis on community participation but still in a predominantly provider–recipient relationship	Partnership with community in planning, implementing and monitoring health programmes
5. Emphasis	Discrete services	Gradual emphasis on integrated services within the health sector	Emphasis on intersectoral approach to health development
• human resources	Mainly clinical orientation – era of medical worker	Primary health care orientation with shift towards community approach – era of health worker	Community orientation with holistic approach to health development – era of multipurpose, community-based health worker
• infrastructure	Urban-centred	Infrastructure and staffing extended to rural areas	Community-based; community-supported health services based on health needs of the community

Table 2 (continued)

	Before basic health services	Basic health services[a]	Primary health care
• technology	Application of technologies based on scientific / clinical research	Limited adaptation and application of technologies based on health services research / transfer of scientific technology; often not affordable for total coverage	Development and application of appropriate technology based on participatory health research, community diagnosis and action research resulting in socially relevant, acceptable and affordable technology
6. Allocation of resources	Mainly directed to urban areas	Urban and rural	Balanced distribution of resources for health based on social equity; resources shared between government, private and community partners in health development
7. Evaluation	Clinical evaluation	Focus on disease reduction, morbidity and mortality	Focus on personal change and participation of communities
	Effectiveness of health technology in accelerating recovery and reduction in disability	Efficiency of health system and technology in disease prevention, accelerated recovery, reduction of disability and rehabilitation	Effectiveness and efficiency of health care delivery in contributing to maintenance and promotion of health and in meeting the basic needs (food, water, shelter) essential for health
	Disease-related epidemiology	Predominantly disease-related epidemiology with increasing awareness of environmental factors	Health-development-related epidemiology emphasizing socioeconomic and political factors in environment which affect health

[a] "A network of institutions... that provide certain indispensable medical care and preventive services to individuals. The services are rendered by professional and nonprofessional staff who have been selected without prior consultation with the community they serve, and the community itself is not necessarily involved in the action taken to improve its health" (Glossary of terms used in the "Health for All" Series No. 1–8. Geneva, World Health Organization, 1984 (Health for All Series, No. 9)).

For the past 40 years, the health profession has been engaged in a continuing debate about the most effective way of improving the health status of the population. The advantages and disadvantages of the two main approaches (vertical programmes and integrated health care) are summarized in Table 1 above. The assumptions and beliefs underlying each approach are presented in Table 3.

4.1 Development of primary health care as an integrated health system

The period from 1949 to the 1970s was characterized by a stable global economy and relatively rapid rates of economic growth, particularly in the Western countries. However, the early 1970s saw the first major economic crisis (the "oil crisis") and global economic recession since the Second World War. The oil crisis had a resounding impact on the stability of international financial markets: only a few countries managed to continue their economic growth. It adversely affected the development and expansion of health services, particularly in developing countries, and exacerbated the health and social problems of the time.

In addressing the development of health services in 1973, the Executive Board of WHO recommended a strategy to respond to the need to provide basic health services. The Board called for a systems approach to the problems of health, rejecting administrative solutions such as a change from vertical to horizontal programme integration. It called attention to the need for a substantial change in attitude, with health services working together with the community as well as with other health-related sectors. Health could no longer be isolated and defined solely within the health sector.

These arguments provided the foundation for the Declaration of Alma-Ata on primary health care in 1978, in which the international health community attempted, by means of policy and strategy statements, to change the view of the problem of integrating health services. The Declaration marked an advance from the purely administrative coordination of health services to a health systems perspective which emphasized the interrelationship of all the components of a system which includes the individual, family and community.

Once again, there was a major debate between those who adopted a "selective" approach to the implementation of PHC and those who supported the development of "comprehensive" PHC services. One area where the efficacy of vertical programmes could usefully be assessed was child health care. Assessments of child health care interventions are summarized in Table 4.

Selective PHC programmes have enjoyed positive results where clinics offer integrated child care. Where integrated child care is not available, the periodic visits by the single-purpose health care teams do not meet the needs of infants born between team visits. There are many cases where even partial integration of services has shown positive results.

Table 3

Assumptions and beliefs underlying vertical programmes and integrated primary health care

	Definition of health	Efficacy of health technology	Community	Health professions	Equity
Vertical programme	Absence of disease Reduced incidence of prevalence	Selection of interventions which are biomedically cost-effective	Provides resources / organization for health interventions	Provide health care Limited or no influence on determinants of health	Limited to specific component of vertical programme
Integrated PHC	Protection and promotion of health and well-being	Adaptation of interventions to local socioeconomic and health conditions	Responsible for own community health programme and shares responsibility for health service	Provide health care and facilitate health promotion	Enhanced across wide range of health services

11

Table 4
Single-purpose interventions: a review of studies in Africa[a]

Study design	Intervention	Conclusion
Longitudinal with control group	Measles vaccination (Kasongo, Zaire)	Reduction in measles deaths partly offset by delayed excess mortality from other causes in vaccinated group
Before / after	Oral rehydration (several studies)	Impact on under-five mortality lower than expected from reduction in diarrhoea deaths
Time series	Community-based nutrition (Iringa, United Republic of Tanzania)	Under-five mortality gains reversed because of malaria
Before / after	Malaria control and measles vaccination (Saradidi, Kenya)	Reduction in under-five mortality attributed to measles vaccination, not malaria control
Before / after	Measles vaccination (Mvumi, United Republic of Tanzania)	Impact on under-five mortality cancelled out by malaria

[a] Information obtained from reference 7.

There have been numerous experiments to develop alternative approaches to integrated health care. Among these are: integrating health and other sectors in development efforts; integrating planning processes; integrating service functions; integrating health care within community and family activities (see Annex 1, "Country experiences").

There were attempts to introduce political accountability at the international level for implementation of the Alma-Ata Declaration as a way of stimulating global action. These showed the health sector's limited capacity to introduce major changes, such as the integration of health technology and health tasks for specific population groups (e.g. the Expanded Programme on Immunization [EPI] for children). There was also an initial shift in approach, with the community beginning to be seen as a partner to be integrated into the health care delivery system.

Integration faced and still faces the restraints of health care delivery. Health administrators have resisted links with other sectors, placing their faith in technology in order to address specific health problems. This attitude was reinforced by mechanisms for funding and resource allocation for specific disease programmes. The main commitment was to health care interventions designed to bring visible improvements in health status in the short term, and little attention was paid to approaches designed to achieve more sustainable improvements in the health of the population. There were clearly no incentives, financial or otherwise, for an integrated approach to health care delivery. Health workers showed

their uncertainty by continually asking for additional funds in order to meet the unmet needs. In the long term, the donor community had a disproportionate influence over the development and operation of national health systems in recipient countries.

As part of its activities to strengthen national health services, WHO has collaborated with a number of vertical programmes on issues related to integration, concentrating mainly on increasing the sustainability of progress made in the control of specific diseases. The technical and managerial capacities of the national health services have benefited from the experience gained during implementation of the specific programmes. A summary of some of these approaches is contained in Annex 2.

4.2 Current trends and issues in integration

Throughout the 1980s, health systems in all countries came under increasing pressure from a variety of sources, including governments concerned about escalating costs and the need for greater effectiveness and efficiency in health service provision. Although the rise in health care costs, as a percentage of gross domestic product (GDP), has been contained in a number of countries, and even reduced in a few, the pressure to increase health expenditure, associated with an aging population, new technology and rising consumer expectations, has continued to grow.

WHO's *Eighth report on the world health situation,* published in 1993 *(8)*, and the World Bank's *World development report 1993 (9)*, which took the theme "Investing in Health", note significant improvements in health status, as measured by increasing life expectancy and declining infant mortality, in both developing and industrialized countries. Nevertheless, disparities in health status have increased both within and between countries.

The key points of the *Eighth report,* which represents WHO's second evaluation of the implementation of the Global Strategy for Health for All by the Year 2000, are shown in Box 1. Key points of the *World development report 1993* are listed in Box 2.

Both these reports note the greater emphasis placed on privatization of financing and provision. However, in the trend towards privatization it is essential to recognize that this can have a disproportionate impact on those in greatest need: children, the poor, the disabled and the elderly.

The process of change in any country must be managed to ensure that, however urgent, it is evolutionary rather than revolutionary and that it does not make impossible demands of the staff who have to implement the changes, especially at the peripheral level.

A suitable infrastructure will be required to manage the change, and all agencies will need to make sure that they strengthen that infrastructure,

Box 1

Key points of the second evaluation of the implementation of the Global Strategy for Health for All by the Year 2000 (8)

Important political and educational advances have taken place, but have been limited by the world recession.

There is increasing commitment to health for all.

Progress has occurred in PHC, but it is selective rather than comprehensive.

General health status has improved, but the prevalence of some communicable diseases, e.g. malaria, cholera, schistosomiasis, tuberculosis and the acquired immunodeficiency syndrome (AIDS), is increasing.

Environmental issues are of increasing concern.

The overall assessment is that there is an increase in disparities in health status, an increase in both communicable and noncommunicable diseases and poor integration of efforts.

The challenges for the future are:

— accountability of governments to the least favoured groups in the population
— redefinition of the role of governments to address priorities
— increased financing for health services
— a balance of responsibilities in the management of health systems
— more international cooperation in health.

There is a need for a new framework for sustainable health development.

rather than weakening it by introducing new vertical programmes. The creation of "baskets" or "packages" of health care programmes should ensure that the total content is relevant to local needs.

4.3 Changes in health sector policies affecting integration of services

The two reports discussed above should be viewed in the light of important sociopolitical trends relevant to the development of integrated health systems. These vary widely between countries. However, a number of trends are discernible in many countries. These include:

— greater emphasis on individual, family and community responsibility;
— increasing concern for the environment and sustainable global ecosystems in view of the continuing growth of the world's population;
— growing concern and, in many countries, action to redress social inequities, meet the needs of minority groups, including ethnic minorities, the disabled and disadvantaged people, and address the rights of women and the elderly;
— growing disenchantment with institutionalism and authoritarianism and a desire for participation and decentralization, shown by the

increasing community and consumer demands for participation in the planning, provision and evaluation of services.

From a health centre perspective, these concerns and trends have manifested themselves in recent years in a number of actions and shifts in policy which are relevant to integration:

• Action has been taken to make health services more equitable and to improve accessibility, particularly for the individuals and communities in greatest need.
• Less emphasis is being put on the financing of health services, with focus instead on the outcomes of health service delivery, including the setting of goals and targets for improved health status. This entails a

recognition of the need to define outcomes of health service delivery, including performance measures, and the need for information systems to monitor and measure performance.

- Health services are being decentralized to regional or district level with integrated systems of delivery based on the population served. Associated with this is a change towards more local management and funding of health services.
- There has been a reorientation from secondary and tertiary services to primary health care, as advocated by WHO, UNICEF and the World Bank, with more emphasis on community and family responsibility and self-care, emphasizing both the need to provide access to essential health services and the generally lower cost of providing such services. *However, secondary and tertiary services form part of a total health service, and every country must determine the extent to which it can provide them without compromising essential health care.*
- A shift from hospital-based to community-based care has taken place, again partly motivated by the need to reduce costs in health provision, but also by the recognition that community-based services are generally more appropriate to the needs of individuals and communities.
- Awareness has grown of the need to move resources from treatment to prevention, motivated by the requirement to reduce health service costs and by the desirability of preventing rather than treating illness.
- There has been a move towards greater collective accountability of providers, particularly physicians, for the quality of care and services provided and the use of resources.
- Significant shifts have taken place towards privatization and there is an increasing emphasis, as described in the *World development report 1993 (9)*, on competition as a way of increasing efficiency.

A greater role is envisaged for nongovernmental organizations in order to improve integration of service provision in view of the growing number of providers. However, nongovernmental organizations are sometimes dependent on the government for funding, as their other sources of revenue tend to be limited. This may restrict their competitive role in health care delivery.

To sum up, there is a move towards:

- district health systems with services purchased, rather than merely funded, on a population basis (though the concept of purchasing services is new and needs to be elaborated before it can be widely recommended to countries);
- organization of the health system in an integrated way to achieve clearly defined priorities and outputs / outcomes, including improved health status as measured against defined health goals;
- a better balance of resource allocation and coordination with respect to hospital and community care, secondary and primary care, treatment and prevention and the roles of the various providers, including physicians;

— organization of the district health system to ensure decentralized accountability of providers and development of appropriate integrated information systems.

On paper these changes in health sector policy are designed to encourage the development of sustainable integrated health systems. However, there is no overlooking the fact that, in real situations, the implementation of such policy trends conflicts with contrary policies and vested interests.

One example of a conflicting policy is the relative emphasis on vertical programmes among donor agencies, for reasons that can be understood from Table 1 above. An example of conflicting interests is the temptation to finance infrastructure using bilateral or multilateral assistance in order to provide a market for high-technology industries in donor countries.

These forces must be recognized and, in some cases, opposed before a compromise can be reached.

5. Review of country experiences of integrated health services

The Study Group reviewed the experiences of a number of countries from the six regions of WHO. Reports of these country experiences can be found in Annex 1. The Study Group noted that the strategies and approaches used in developing integration vary from one country to another. They include decentralization of health services, integration of vertical programmes at district level, integration of nongovernmental organizations and government services, and the integration of health in community development.

5.1 Outcomes

The experiences of the countries discussed by the Study Group revealed the following lessons for developing integrated health services:

1. Integrated health services are cost-effective.

2. Savings were made by hiring one multipurpose health worker instead of several single-purpose workers.

3. Integration is easier at the lowest levels, preferably at the point of first contact with the patient.

4. It is better to place new programmes within an integrated set-up, provided that the programmes are relevant to the health problems of the area.

5. An integrated health service acts as a good entry point and a unifying force in a network of health-related agencies covering such fields as agriculture, social welfare, education, employment, public works and local government.

17

6. An integrated health service is more sustainable than vertical health programmes, especially in smaller and poorer countries.

7. Accountability is high in an integrated health service since the actions of individuals can easily be monitored at the community level.

5.2 Expected gains

The Study Group identified four major gains which integration of health services may be expected to achieve.

5.2.1 *Improved efficiency and productivity*

Integration can lead to more efficient use of health service resources. Better organization of tasks and scheduling of services and treatment uses staff time more effectively. Better coordination between levels of services, departments and units can reduce resource requirements and duplication of activities. Greater efficiency can be achieved by (a) improving the use of support services, such as training and logistics, to provide the supplies and services needed by health workers at different levels; (b) reducing duplication of records by bringing together the public health, clinical and laboratory information pertaining to a particular individual in one file; (c) combining simple treatment and preventive activities in one location in order to make the best use of available facilities and equipment; and (d) improving the scheduling of special diagnostic and therapeutic services, particularly in hospitals.

5.2.2 *Improved health status*

Integration can improve the overall effectiveness of the health system and thus benefit the health of the population. Addressing health problems in a holistic manner and taking action both against actual diseases and against their underlying causes use available resources more effectively and increase the impact on health. Active and sustained participation by the community, as well as individuals and families, in planning and monitoring health action can reduce the community's dependence on health services, encourage home care, and eventually reduce the overall demand for and cost of medical services. Health monitoring with the active participation of the community can provide a basis for more effective and rapid control of epidemics, a better understanding of disease determinants particularly in the local context, an integrated response to the community's clinical demands and public health needs, more effective health promotion and disease prevention, and a database for health research and continuing education of health workers.

5.2.3 *Improved user satisfaction and convenience*

Improving health services in order to increase their convenience and satisfaction for the user can benefit both the user and the services. For the user, it provides a more personalized service which can address the

18

individual's complaints as they are presented to the health worker. It can reduce the cost of using health services by limiting the number of visits to be made by the user, thereby saving time for both user and provider. It can also facilitate the provision of the information necessary for more effective follow-up and referral. Most importantly, it can enhance the health care component of the service by creating an opportunity for more personalized consultations and records.

5.2.4 *Improved equity*

All the country experiences reported to the Study Group reflected a desire to improve equity, particularly in access to health services. Accessibility has several dimensions, including physical accessibility, access to high-quality care and financial accessibility. Integration efforts aimed at improving efficiency in the use of health sector resources could lay the basis for equity by redistributing responsibilities for health care for specific groups among public, nongovernmental and private providers. Equitable access to health services is a matter of social justice and the basic human right to health.

Health inequalities, both within and between nations, have always been unacceptable to the advocate of primary health care. Initiatives to promote integrated health care delivery are aimed at providing a more efficient and effective service to meet the need of *all* people. The more efficiently we use scarce resources, the more likely we are to reach the whole population.

6. Model of an integrated district health system

This section describes a new model of the district health system which, in the opinion of the Study Group, is the most appropriate level for the introduction of integrated health care. It is based on previous models developed by WHO, but focuses on managed, comprehensive and integrated primary health care as the foundation of the district health system. A critical factor in this new model is the complete integration of the district hospital into the district health system. The Study Group proposes innovative ways of doing this.

The district is the most suitable level for coordinating top-down and bottom-up planning, organizing community involvement in planning and implementation and improving the coordination of government and private health care. It is close enough to communities for problems and constraints at community level to be understood. Many key development sectors are represented at this level, thus facilitating intersectoral cooperation and the management of services on a broad front. The key features of a district health system are shown in Box 3 and Fig. 1.

The district health system *(10)*

In 1986, the WHO Global Programme Committee defined the district health system as:

"A health system based on Primary Health Care is a more or less self-contained segment of the national health system. It comprises first and foremost a well-defined population, living within a clearly delineated administrative and geographical area, whether urban or rural. It includes all institutions and individuals providing health care in the district, whether governmental, social security, nongovernmental, private, or traditional. A district health system, therefore, consists of a large variety of interrelated elements that contribute to health in homes, schools, work places, and communities, through the health and other related sectors. It includes self-care and all health care workers and facilities, up to and including the hospital at the first referral level and the appropriate laboratory, other diagnostic, and logistic support services. Its component elements need to be well coordinated by an officer assigned to this function in order to draw together all these elements and institutions into a fully comprehensive range of promotive, preventive, curative and rehabilitative health activities."

The term district is used in a generic sense to denote a clearly defined administrative area, which commonly has a population of between 50 000 and 500 000, where some form of local government or administration takes over many of the responsibilities from central government sectors or departments, and where a general hospital for referral support exists. The actual organization of district health systems obviously depends on the specific situation in each country and each district, including the administrative structure and personalities involved. Nevertheless, the general principles for developing such systems are based on the Declaration of Alma-Ata and the Global Strategy for Health For All, and incorporate the following:

- equity
- accessibility
- emphasis on promotion and prevention
- intersectoral action
- community involvement
- decentralization
- integration of health programmes
- coordination of separate health activities.

6.1 Components of the district health system

In an effective district health system, each component has an important role to play – the individual, the family, the community, health units and health centres, and the first-referral level hospital, as well as health workers and interrelated elements from health and other sectors providing support.

It is becoming increasingly evident that responsibility for health begins with the individual, the family and the community. Personal health

promotion and the application in everyday life of information about disease prevention and control and environmental health have a positive impact on local health problems. Care of young children and the elderly, good dietary practices and simple remedies are important elements of home health care. The role of women as the main providers of health care in the home is critical to family well-being and, by extension, to the health of the community.

District health systems recognize, encourage and strengthen these contributions to community health and ensure that the next level of care is accessible when needed. Visits to the home, school and workplace by community health workers and other members of the health team, provided that they are undertaken with well thought-out objectives in mind, reinforce the integration of positive health action in a variety of environments.

The term *health centre* is used to describe a variety of facilities that provide organized health services at district level. Thus, health centres are the institutional base from which most primary health care services are delivered. In an effective district health system, a network of basic health units, e.g. health houses or health centres, is set up as close as possible to where people live, so as to maximize coverage.

At health centres, health care sessions may be multipurpose integrated clinics at which a variety of consumers' needs are met. Other clinic sessions may provide services for a group of specific clients, e.g. the elderly, or offer a cluster of services such as maternal health, child health, immunization and family planning. In the latter case, a mother will receive all necessary services for herself and her children at one visit (the "supermarket" approach adopted by the United Republic of Tanzania and other African countries – see Annex 1).

Health centres may also include programmes for health development, covering promotion and protection of environmental health at home, in school, at work and at leisure. These programmes have a greater impact when integrated with other health services, such as health education in schools or early-childhood nutrition.

If services are to be successfully integrated at this level, there must be an information system linking providers of health care at various levels with each other, the client and the community, and the district management team. Data which relate to individual and family records and community health patterns are management tools to be utilized at both health centre and central levels within the district. The health centre should be linked with the community and with first-referral hospitals in a wide variety of activities.

Hospitals are part of the district health system. Their functions should be complementary to and supportive of PHC activities in the district. They may provide the core facilities for maintenance, information and supply systems and the laboratory and other diagnostic investigations requested

Figure 1
Components of the district health system
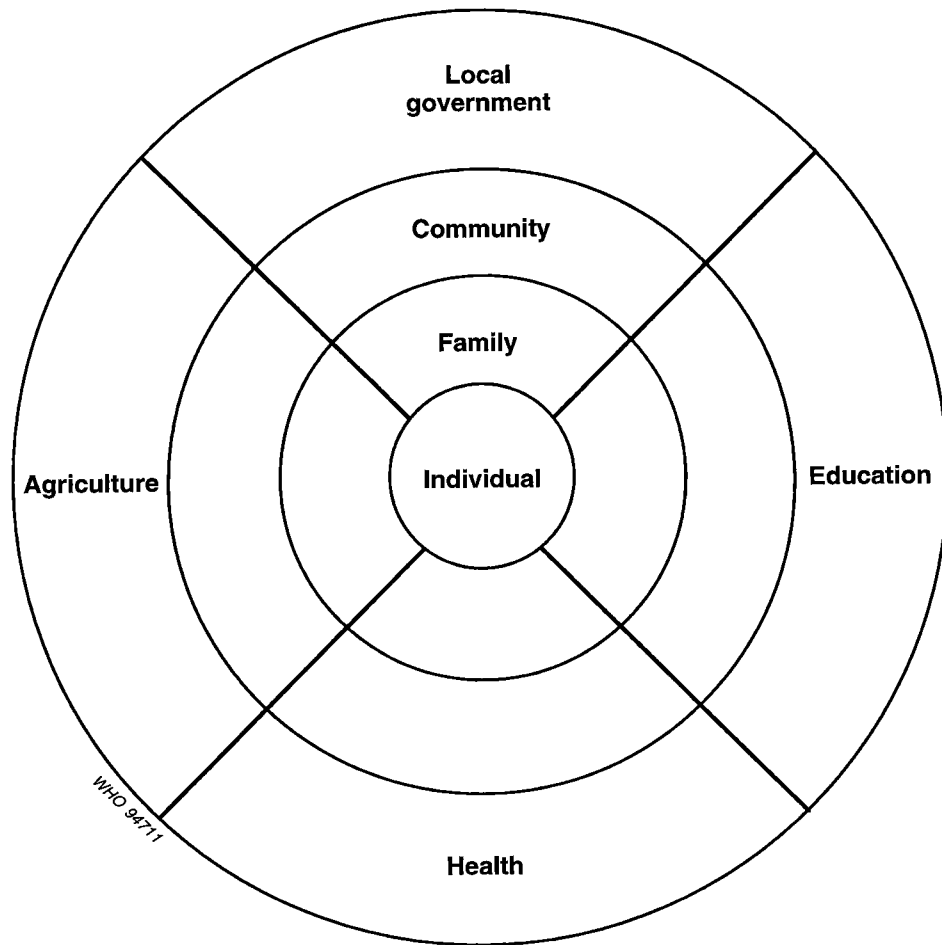
by other providers of health care. The district hospital should be accountable to and under the control of the district health authority to ensure that services are integrated.

As an organization, however, the hospital has a defined set of functions focusing on secondary care. This care is episodic and specialized and, in most cases, meets only part of the needs of the individual and family. For this reason it is rarely effective as a basis for integrated health service delivery, because it tends to be inward-looking, concerned with individual patient care rather than the community as a whole. New ways of integrating hospital-based services into the district health system need to be found.

A fully integrated district system should also include a wide range of *intersectoral components* which involve joint effort to achieve district

health goals. Such components should include environmental, educational and social services, as well as locally appropriate income-generating projects.

6.2 Model of an integrated district health system based on primary health care

The Study Group used a systems approach to develop a model of an integrated district health system, with PHC as the key subsystem or service. The community is the foundation of this infrastructure and is actively involved in the development of services relevant to its health needs.

The various providers involved in PHC must be brought together in an integrated system to serve the fundamental interests and concerns of the community. The key to successful development is a strong and increasing role for the community, not only as an adviser but, more importantly, with an ownership and, therefore, a management role in the implementation of integrated PHC.

PHC in this context means a system of care which is closely linked to the community and, ideally, is owned and managed by the community. Based on this infrastructure are sets of vertical programmes or services which provide secondary care. Each deals with only part of the health care needs of the community (see Fig. 2). The problem in the past has been that these vertical elements have fragmented what should be an integrated service.

Figure 2
Model of a district health system based on primary health care

Secondary level of health care (govt., private, NGO)	Maternal health	Child health	Surgery	Mental health	Tuberculosis	AIDS	Malaria	Environmental health	Other services	Vertical programmes
Primary level of health care (govt., private, NGO)	Primary health care									
	Community									

WHO 95505
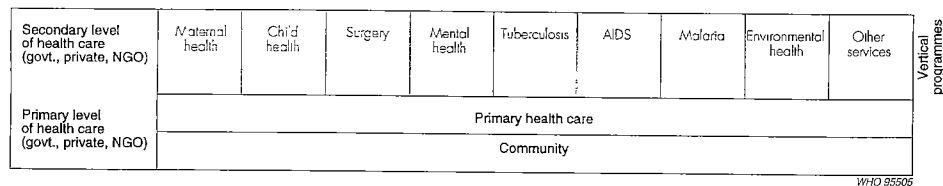
One important problem in integration is the place of the hospital in the district health system. While major attempts have been made to reorient hospitals towards health for all and help them to relate more effectively to PHC, there still appears to be some uncertainty about the real role of hospitals and how it fits in with the role of PHC. There is also some confusion about the relationship between PHC and other community-based services.

In most countries, health systems are organized and managed in two groups — hospital-based services on the one hand and community-based services on the other, as shown in Fig. 3. This division of services is essentially about the place where care is provided, ranging from the most decentralized care — in the home — to the most centralized care — in high-

technology hospitals. The door of the hospital can be considered the boundary between hospital-based and community-based care. This division takes no account of the level of care or of accountability. Furthermore, it may limit the role of PHC, which may become just another variant on the vertical model.

Figure 3
Division of health care at district level by location of service

Hospital Community

CENTRAL   LOCAL

WHO 95506
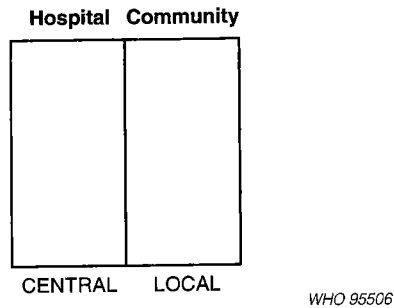
An alternative way of organizing a district health system, which takes these factors into account, is shown in Fig. 4. This divides the health system into primary and secondary care, not according to place but by levels of responsibility and complexity, ranging from self-care to the most highly specialized techniques.

Figure 4
Division of health care at district level by responsibility and complexity of service

COMPLEX

Secondary health care

Primary health care

SIMPLE

WHO 95507
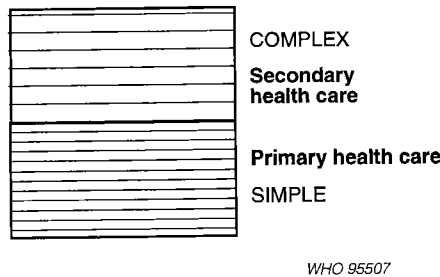
The model eventually developed by the Study Group and shown in Fig. 5 combines these different dimensions of the health system. PHC is based mainly in the community, where most of it is located, but also in the hospital (e.g. accident and emergency departments and community hospitals where primary care providers may have clinical responsibilities). Secondary care is likewise provided both in hospitals, as in the past, and in the community. For example, the discharge of patients from tuberculosis or psychiatric hospitals into the community can, or should, be the continuing responsibility of a specialized health service unless these patients are specifically transferred back to the care of primary providers.

24

Figure 5
Integration of health care at district level
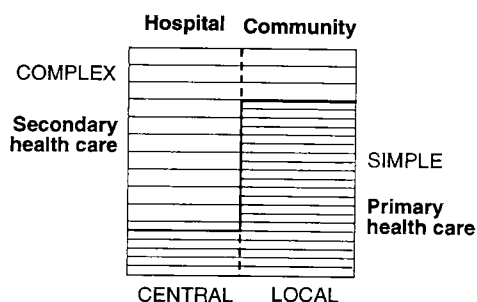
WHO 95508

Figure 6
Shift of resources and services from secondary health care to primary health care
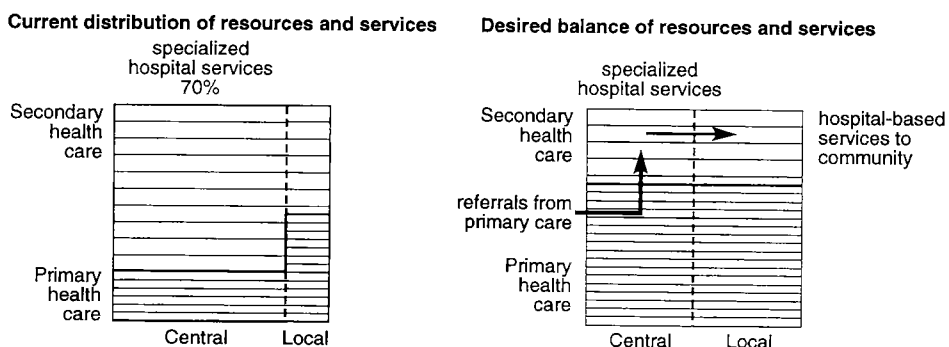
WHO 95509

In line with the Study Group's model, Fig. 6 shows a possible shift in the current balance of services and resources with respect to hospital and community-based services on the one hand and primary and secondary care on the other. These changes were implied in the *World development report 1993* (*9*).

This model suggests an alternative to the current perceived division of health systems into hospitals and PHC, namely that the district should be divided, organizationally, into PHC and secondary (specialized) care. While there are certain advantages in retaining the hospital as a unit there are also disadvantages (see Table 5).

6.3 Implementing integrated district health systems based on primary health care

6.3.1 *Planning*

The first step in implementing the above model of an integrated district health system (Fig. 5) is to plan services jointly with the community, with

25

Table 5
The role of the hospital in the district health system

Advantages

A physically distinct unit which is readily perceived as a unit of management.

Services, including maintenance and other activities which support the district health system, can be coordinated under one roof.

Provides a base for education, training, skills development and research.

Perceived and valued by communities as an important health care resource.

Disadvantages

As a centre of power and influence, continues to dominate health systems and to absorb resources from the less influential primary and public health services in the community.

Major resources are tied up in plant, equipment, buildings and support services.

In general, may have little interest in PHC and may tend to focus more on secondary or even tertiary care.

Has as its primary goal the development of its own range of services, rather than serving the population's overall health needs.

May fragment the essential continuum of care (the "seamless service") in that when patients are discharged there may be little continuity of care as the hospital does not see itself responsible for follow-up.

The hospital as an organizational entity may fragment the organization, management and delivery of PHC.

shared accountability. This entails defining common problems and the tasks and skills required to resolve them, and deciding who will be responsible for doing so.

Managing such a system requires a different type of leadership from the bureaucratic style of health systems in many countries. It calls for team leadership, bringing together a variety of skills including those from different agencies, establishing a network of relationships with PHC providers within the government services, and establishing links and interfaces with providers from nongovernmental sectors, including the private sector.

One major implication of this approach is that the resources for this integrated PHC service — including financial resources — need to be pooled. Financial responsibility should not be relegated to the community alone. It has been a problem in the past that resources for PHC come from many different sources, and there may be no way of shifting them from low-priority to higher-priority areas.

6.3.2 *Decentralization*

The political decision, taken at national level, to decentralize the management of health services is critical to the development of a

sustainable district health service. A clear long-range vision of a national health policy which favours integration also needs to be developed. An organizational structure which favours decentralization needs to be created, or existing models improved. Revised operational procedures will be needed to supplement the organizational reform, and administrative, technical and managerial capabilities must be upgraded to handle the devolved responsibilities and funds.

These changes are essential if the health system is to move towards integration. They are also needed to prepare and mobilize communities for comprehensive PHC, as well as enabling the health system to be receptive and accountable to the community. Other prerequisites are a legal framework with a public health law underpinning the reform process and high-quality leaders at central and local level who are committed to integration.

It has been the experience in some countries (Finland, New Zealand) that the support of the central level is necessary for the reallocation of resources and budgetary changes made by the district. Legal and administrative regulations may need to be introduced. From the experience of both developing and developed countries, it has been found that direct allocation of funds to the district level allows for integrated and equitable use of resources, but it may take some time before a balance of allocation is reached between PHC and other services.

The budgeting system should be integrated, with functional services (e.g. tuberculosis, malaria, secondary health care and PHC) forming the budgetary divisions rather than line-item expenditure (e.g. salaries, transport), which hampers flexibility. The principle behind this budgeting framework is that service managers are accountable for the outputs / outcomes of their service, and are required to achieve agreed goals with the resources allocated to their service. Such accounting methods should be accessible to the relevant officials for review and follow-up. Integrated PHC programmes as well as hospital-based services should adopt this accounting system.

6.3.3 *Community involvement*

Leadership of district health services may come from within the health care services or from the community. Sustained development of health systems will depend upon the degree of involvement of the community as health care providers, decision-makers and planners. In order to achieve effective involvement of the community in the decision-making process, appropriate structures (health boards / committees or existing local councils) are used to facilitate the exchange of information. Transparency in managerial processes, such as priority-setting, contract negotiation and allocation of resources, is essential for maintaining community participation in decision-making.

Integration of district health activities with other community developments, such as education, recreational and sporting facilities and the

creation of employment opportunities, may help to solve critical health problems by promoting a healthier environment and lifestyle for the individual.

6.3.4 *Objectives, goals, priority-setting and indicators*

In an integrated health system based on primary health care, objectives and goals will be set in consultation with all the providers concerned as well as with the community. The district health service should be sensitive to the needs of special communities and disadvantaged groups, so that goals and targets will reflect the different epidemiological and socioeconomic status of each of these groups. The participating health care providers and the management team should identify, from within, the overall goals and targets of the district, integrated work plans, and goals and targets for each service.

In this way, priority-setting is based on local realities: community needs, geographical situation, available resources (particularly staff), review of the appropriate mix of tasks for health workers, referral possibilities, and existing organizational and management infrastructures.

Health centres and other front-line facilities are the key units for this "microplanning" process. Yet health centres in many countries operate as purely administrative units, without setting local priorities or monitoring improvements in health and health care.

To ensure that complex integrated health systems are responding adequately and cost-effectively to needs, health priorities and unforeseen emergencies, indicators will be developed to assist in monitoring the whole system and its constituent parts. They are required to measure quality of service and equity of access. Indicators should also provide a basis for judging output against the cost of purchasing services from the various providers in the system.

6.3.5 *Human resource development and management for integration*

If health personnel and community leaders in the district health systems are to play a real part in the process of integration of health systems, they will have to form a mutually supportive network, which will require far-reaching changes in attitude. Such a change cannot be sustained unless training and refresher programmes are arranged to prepare both community and health care providers for their roles in an integrated health system. Preparation of community members for their involvement in their own health and in the health system should begin at primary school and continue at higher levels of education.

Since health workers reflect the values and attitudes of the society to which they belong, their training should involve a further examination of attitudes and a critical appraisal of professional boundaries. Effective training requires a new approach to the preparation of health workers, based on an updated analysis of functions and task definition in an

integrated health system. Curricula for the health professions should reflect a holistic approach to health care. After training, staff should have the skills and knowledge of how to work with communities and an appreciation of the role of colleagues from other disciplines.

The formal preparation of health professionals should include supervised experience of working in the community. Such experience should also be a part of further on-the-job training and continuing education. Degrees in integrated health care delivery should be awarded in order to increase the credibility of initiatives for training programmes. These training experiences pave the way for a multidisciplinary approach to health care delivery as part of a team, in which the provider of a specific health package is motivated to respond to patient needs holistically and to avoid fragmentation of care. They also facilitate a multidisciplinary, integrated approach to supervisory functions, human resource management and accountability at both district and national levels.

Supervision of personnel must include a large element of on-the-job training, particularly in a large district which has a number of isolated health centres or posts. Adequate budgetary provision must be made for the supervisor to visit all these posts at regular intervals. The visit should be long enough to allow the supervisor to assess staff performance and quality of care, including community satisfaction, and seek to remedy deficiencies, improve health care delivery and raise the morale of health care providers, assuring them of their valuable role as members of the district health team.

6.3.6 Multisectoral integration

The district health system can provide an environment conducive to successful intersectoral collaboration. This collaboration may begin as an individual voluntary effort and progress to a more formal integration of services. It covers environmental conditions such as clean water, improved sanitation and housing, and socioeconomic conditions such as better food supplies, and raising income and educational levels as means of improving health. It is also widely recognized that sustained improvement in the health status of populations can be achieved only through the combined impact of a wide range of socioeconomic developments.

Intersectoral action at district level may be based on a functioning local structure, such as a district development committee. Some countries have evolved a more developed local government system in which further integration of intersectoral functions is possible. A district development plan, incorporating the broad priorities of sector plans and based on community needs, can be a forum for collaboration with other sectors.

The roles of different sectors in the implementation of the plan should be worked out by the local district authority in collaboration with all partners.

It may by some time before officials from other sectors fully accept the need for collaboration and integration of health care delivery. The important thing is to see some shift in attitudes in favour of collaboration. It has to be noted, however, that at any given moment there is an interaction between dynamic forces for and against integration. Opportunities for integration should be explored and grasped.

7. Issues affecting integration

7.1 Problems encountered

7.1.1 Changing slogans for public health initiatives

At the Alma-Ata conference in 1978, national authorities and the international community proclaimed PHC as the new universal framework for health development. Within a few years, groups and agencies had devised their own distinctive slogans ("selective PHC", "Child Survival Summit goals", "Sick Child Initiative", etc.) which themselves have contributed to wastage of resources at country level and to confusion in understanding the PHC approach. This fact has hampered the development of comprehensive health care, which requires comprehensive health policy formulation and priority-setting based on local needs.

7.1.2 Definition of primary health care

Despite widely held expectations of the PHC approach, progress towards health systems based on PHC has been slow. PHC emphasizes social justice, a broad concept of health, intersectoral integration and participation by communities. The goal is to develop preventive, promotive and rehabilitative services providing comprehensive, equitable and holistic treatment.

PHC continues to be plagued by both conceptual confusion and operational uncertainty. In some countries, it is perceived as lower-quality care and compared unfavourably with hospital-based care. Opinions tend to be polarized between the "comprehensive" approach, which sees PHC as a philosophy and strategy for reorienting health systems rather than a service which requires management, and the "selective" approach, which advocates the piecemeal implementation of certain aspects of PHC together with vertical programmes such as immunization and family planning.

Despite these problems, most countries have continued to implement some form of PHC, although it has often been dominated by primary medical care. Few countries have seen PHC as an organizational strategy, a key subsystem of the health system to be organized and managed in its own right. Consequently, it remains largely a disjointed set of fragmented provider and community groupings with little collective power to influence decision-making.

For many years, as reflected in publications of WHO, PHC has been seen variously as:

- based on a philosophy of equity and social justice;
- a strategy concerned with intersectoral collaboration;
- a level of care that is the first point of contact with the health system;
- a set of activities that includes basic clinical services.

This broad view has created difficulties in operationalizing PHC. From an operational perspective, PHC should strive to be:

- *generalist*, providing comprehensive care, which includes promotion, prevention, control and rehabilitation, for all problems presented to it;
- *holistic*, concerning itself with the whole person in the context of the family and community;
- *continuing*, using enrolment and registration strategies for regular follow-up and monitoring of health care and discouraging any behaviour which carries a high risk of endangering health.

7.1.3 Top-down approach to health planning

Planning has been concentrated mainly in national institutions and agencies. It was assumed in the past that, if decisions were made at a high level, a natural "trickle-down effect" would result in health for all at the local level. The goal of health for all based on primary health care reversed this orientation and stressed the need for new measures to facilitate and mobilize provincial and district capacities so that people could solve their own problems at local level. The recent top-down approaches to health planning, reflected in the concept of health intervention packages to guarantee minimum care, can hamper integration and hinder district planning based on local needs. Furthermore, such efforts tend to divert decision-making from local and district levels.

7.1.4 Piecemeal solutions to complex health system problems

Many vertical programmes have been promoted by international agencies who wanted to keep track of the money they provided and were looking for quick and dramatic results. Too little attention has been paid to the long-term consequences of establishing separate hierarchies, with the result that countries have repeatedly been left with large numbers of staff from vertical programmes who have invariably resisted integration. Piecemeal projects have sometimes been supported to solve complex health system problems. While financial support for national plans of action based on health for all and PHC is essential, this piecemeal approach has merely fragmented the available assistance and in-country support.

In order to forestall the development of a donor policy that favours fragmentation, every country needs to develop a clear national policy on donor assistance which favours integration. In order to avoid confrontation and foster collaboration, there is a need to involve donors

in national planning and nationals in donor planning. Internationally, a mechanism should be developed to redirect donor priorities towards an integrated approach. WHO can play an important role in this process and in the coordination of donor and agency interventions in countries.

7.2 Challenges to be faced

7.2.1 Relationship between health care institutions

The aim of integration is to unite a number of existing structures or systems, e.g. hospitals and health centres, both with one another and with other sectors (agriculture, education, water supply and sanitation, etc.). Likewise, integration is linked to the important issues of decentralization, devolution, accountability and community action for health.

Vertical integration of health care calls for clear definition of roles and responsibilities at the various levels of the health service infrastructure. However, in some countries the work done by hospitals is similar if not identical to that carried out by health centres, giving the impression of competition rather than integration. For integration to be a success, changes are needed in all these areas.

Hospitals will need to come under a unified command at the district/municipal level. All staff, in both preventive and curative fields, will need to feel a joint responsibility for the overall health of the community which is not limited to their immediate sphere of activity. The manager of the district will need a public health orientation or qualification, as will the chief officer of the hospital.

An efficient district development committee must be set up with the task of preparing an overall district development plan. This plan will include the roles to be taken by the various sectors in implementing the plan, with a clear definition of the accountability and responsibility of all parties. Attitudes must change to bring about cooperation instead of competition.

7.2.2 Capacity-building and incentives for integrating systems

In individual vertical programmes, tools, methodologies and modules for training health workers have been developed. This capacity-building has been carried out according to the needs of the programmes rather than those of the workers, leading to duplication of effort and wasted time and resources. It was probably justified in the early 1980s when many health workers in the field had very few skills in vertical programme areas. In the present circumstances, the process of in-service capacity-building for different programmes needs to be integrated.

Countries are increasingly calling for support in the development and organization of integrated training. Management of health care services at the district level has become increasingly challenging and difficult in the last few decades, and district health staff find themselves ill-prepared for the tasks they have to undertake. Basic or in-service training of all

personnel at district level must be a major concern for health system development.

The concept of the "learning district" offers integrated continuing education based on an assessment of local needs and resources and using the existing separate training programmes. The aim is to learn with the community. Integrated training material has been developed which combines management and organizational issues with technical issues. An integrated and supportive approach will both reflect the real situation and enable new knowledge to be applied to it.

7.2.3 Unity of purpose

Unity of purpose for health improvement on the part of central government is essential for integrated and coordinated action for health. However, any change in political and administrative leadership in the health sector may result in significant changes in policies, programmes and strategies. International support for country action to integrate health services and a sound legal framework as a basis for organizational change will promote continuity and stability.

Diversity of views about the problems to be faced leads to fragmented approaches to their solution. The socioeconomic and political implications of health issues are becoming increasingly apparent to politicians, economists and professionals in other sectors. But public health professionals tend to emphasize the importance of health technology for preventive and curative services, while avoiding debate on the implications of socioeconomic policy for health and health systems. This position has reinforced other sectors' perception of public health as being related mostly to health services and the control of diseases and epidemics. The absence of information providing an intersectoral and integrated view of issues and their health implications has also contributed to problems in joint priority-setting and planning. Resource allocation methods which reinforce sectoral interests further accentuate the boundaries between the sectors and inhibit integrated strategies and action which could promote health.

A fundamental problem in many countries is that the management structure is driven by specialist vertical interests based in the ministry of health. For example, the national MCH director may manage MCH programmes, even at district level, separately from the line management arrangements of the ministry headquarters and the district health officer, which means that the latter has no direct control over operational delivery of MCH services.

Integration of the district health system includes the integration of management structures. Thus, the district health officer must be fully responsible for the delivery of all health services within his or her district. He or she receives technical and professional advice from national directors, but is accountable to the ministry headquarters for the

operational achievement of health goals related to the various national programmes.

7.2.4 *Community action for integration*

Community responsibility and action for health is a powerful force for integrating health services. But sustaining community action for health remains a major challenge to the health sector. Despite many successes, the majority of community health programmes and activities come to an untimely end. This lack of sustainability is due to a number of adverse factors. Many professionals have no experience of and no faith in community-based action. In some cultures there is little, if any, tradition of active partnership between communities and the government sector, since the latter does not normally permit any form of community action that it perceives as a threat to its authority. All too often, community participation is hampered by bureaucratic structures, and vertical health interventions act as a constraint on community action for health.

Professionals have grown used to the idea that they need to decide everything for the patient because of the increasing complexity of medical knowledge and technology. As a result, too little attention – if any – has been paid to the wealth of knowledge which can be found in each and every community. Thus the gap has widened between health professionals, who are expected to have knowledge, and the lay public, who are expected to defer to the judgement of the professionals.

In many countries, poverty and deprivation appear to contribute to the erosion of community health activities, especially where there has been a loss of self-esteem, self-sufficiency and social status.

Moreover, many obstacles and conflicts can arise in the development of community action, such as problems of authority and priority-setting, initiative and responsibility, and the different expectations of different partners.

7.2.5 *Health systems research*

Health systems research has placed little emphasis on organizational studies related to the integration of services and the process of organizational change for greater integration. Some obstacles include: low priority of organizational studies on integration, the absence of political commitment and financial support, the need for a multi-disciplinary input and a long-term commitment to such studies, the absence of a policy framework for integrating top-down and bottom-up approaches to organizational change, the shortage of appropriate research methods and skills, and reliance on traditional public health institutions. Research on integration of health services and systems would also require the integration of health systems research activities into decision-making processes.

7.3 Obstacles to change – a case for rational analysis

The obstacles to change and the likely causes of failure of integrated health care delivery have been discussed above. Some of these are reconsidered here with a view to stimulating rational analysis and research.

- Both the community and staff may be inadequately sensitized about the benefits of integration.
- It is important to recognize that training is usually provided to a select group of leaders. The existing selection process may serve to keep officers with a public health orientation on the sidelines of the hospital management structure. A major hindrance at present is the lack of clear role models committed to the value of integrated thinking.
- Integration may require additional resources in order to create a more comprehensive health service.
- There may be no coordinated planning across sector boundaries. This may be compounded by a lack of management support for an integrated approach and the sectors' desire to defend their "territorial rights". Some obstacles arise because other sectors are unaware of the impact on health of the approach they have adopted. This leads to differing goals and perceptions that may run counter to an integrated approach.
- One major barrier to integration is the perpetuation of separate planning, reporting, monitoring, evaluation and accounting systems, as demanded by many donors.
- An integrated approach at the local level is made more difficult by a rapid turnover of leaders. There may be a lack of vision and no national policy for integrated health care.
- One major hindrance is a centralized civil service or public service commission, in some countries dating back to the colonial era, which may hamper the establishment of local responsibility for recruitment and staff discipline.
- Centralized funding hampers effective local planning.
- Involving communities in the decentralized integrated approach may be difficult if the people are so poor that their main concern is survival. Illiteracy is a major obstacle for some communities.
- Without an underlying political will favouring integration, local efforts will be hampered. An overall vision of the goal to be achieved is vital to any process.

The plan of action described in section 8 is designed to overcome these obstacles.

Failures must be studied as well as successes, not only in order to avoid making the same mistake in the future, but also because they often provide a better insight into the various forces which have contributed to the outcome than success stories do. Too often, failure leads to discouragement rather than to rational analysis. The Study Group considered a reference model for analysing the "obstacles to change", as proposed by Bryant and quoted by Guilbert (11):

35

- dynamic conservatism
- institutional bureaucracy's built-in resistance to change
- complexity of programme change
- lack of institutional resources
- lack of model upon which to base changes.

The complexity of programme change is a reminder that, as Table 1 on page 6 shows, integration is not a panacea. The decision to increase integration has both advantages and disadvantages. These should be weighed against each other in order to reach the optimal decision which, of course, may not be ideal from any single viewpoint. A first question to be answered is whether integration (or more integration) is actually appropriate. The question "why integrate?" leads on to the questions "what should be integrated?" and "when?" and "where?".

Once the decision has been made to go ahead with integration, or more integration, it still remains to decide how to integrate. Two documents have developed this process in relation to tuberculosis control in primary health care (*12, 13*). A plan of action is not sufficient unless it is in itself a learning process.

8. Plan of action

The model of an integrated district health system developed by the Study Group abandons the traditional divide between community-based and hospital-based care. Instead, care is to be categorized by the level of complexity and responsibility involved, ranging from self-care and simple PHC to secondary and tertiary care in the hospital or the community (e.g. follow-up care for patients discharged from tuberculosis or psychiatric hospitals). The new model aims to ensure that adequate attention and resources are allocated to PHC, to redefine the role of the hospital (which currently receives a disproportionate amount of resources in many countries) and to allow existing vertical programmes to operate within the PHC framework without duplication of effort.

This section presents a proposal for action at international, national and district levels. WHO and other international agencies, as well as countries, are encouraged to implement the process of integration described in section 6 of this report. Box 4 on page 42 lists 10 steps to be taken at national and district levels in order to work towards an integrated district health system. These steps should be seen not as discrete activities but as stages in a continuous process.

8.1 Guidelines for international action to promote integrated health care delivery

8.1.1 *Sharing information*

The Study Group considered the present situation and suggested ways to promote and support integrated delivery of health care. This will require

commitment by leaders, decision-makers and educators in different countries. WHO could usefully encourage the development of a network of relevant actors and institutions to exchange information, carry out analyses and studies on ways of responding to emerging issues and encourage innovative operational approaches.

The subject should be reviewed in two to three years' time to take stock of developments and address issues that it was not possible to cover adequately at the present meeting.

8.1.2 *Leadership and advocacy*

WHO can play a valuable leadership role in the campaign for integrated health care based on equity and effectiveness. This will require intensive and extensive publicity based on practical experience and real achievements in developing countries, in the form of articles in both professional and popular journals, for example. Through active initiatives for joint international efforts in this direction, WHO can further strengthen its role in the coordination of international health work.

The World Health Assembly and the Executive Board may, for instance, wish to consider: (a) ways of developing the integrated district health system approach; (b) ways of following this up by practical action within the Organization; and (c) ways of involving other partners in an international joint venture.

In concrete terms, WHO should promote an integrated infrastructure for health systems development. This could be done by lobbying and by the use of modern media techniques, possibly calling upon a prominent international figure to advocate an integrated approach.

8.1.3 *Building partnerships*

This report has discussed integration in the sense of bringing together those sections of different agencies and organizations which share the same problems, vision and goals, and are prepared to work together to achieve these goals using common recources and technologies. WHO, as the United Nations technical adviser on health matters, can play an important lead role in building interagency partnerships to strengthen the development of an integrated district health system based on PHC. In this regard, it would be important for WHO to pursue a continuing and proactive dialogue with other key stakeholders in the field, notably the World Bank, the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP) and major donor agencies, perhaps through project teams, with a view to building a partnership for investment in health through an integrated approach. This should lead to an ongoing initiative such as an intensified programme for health infrastructure development.

8.1.4 *Improving health infrastructure*

The international donor community and WHO should concentrate their efforts on building capacity at national and district levels. The vision and influence of the international community can do much to support integrated action at national level. The focus of this support should be to develop the capacity of the organizational and functional infrastructure which will sustain country integration programmes in areas such as:

— drawing up a unified national strategy and plan for integrated health services as a part of integrated development;
— promoting and replicating innovative approaches;
— developing integrated learning materials and other relevant tools;
— promoting integration in partnership with donors at country level;
— creating systems that promote decentralization, including pooling of resources;
— designing indicators for integrated health infrastructure development;
— providing resources to compensate for local inequities in access to health care;
— keeping equity high on the international, national and local agenda.

8.1.5 *Integration and coordination within WHO*

WHO incorporates a number of vertical programmes, some of which have limited coordination with each other. There is an urgent need for global policies, models and prototypes that would serve as integrating mechanisms for district health systems. WHO should keep its operations (at global, regional and country levels) under critical review in order to facilitate better coordination, and even functional integration, of programmes with closely related objectives.

8.2 Guidelines for a national strategy and plan of action

Improving integrated health care delivery calls for major changes in the national health system and in particular a well-functioning district infrastructure. The development of such an infrastructure and the improvement of its capacity as an integrated health system are continuous processes which can be initiated with specific steps. The strategy for change should, in the first instance, take into consideration the morale of health workers, their training and support needs and the basic conditions of the health infrastructure. The action required is described below.

8.2.1 *Building a national policy and strategy framework*

• *Developing a national vision and mission statement through a process of consultation.* The mission statement must spell out the government's commitment to improving people's health by providing the resources needed.

- *Formulating a national health policy and strategy for the health of the country.* This should include a model for a district health system which will provide a framework for development and implementation and include the outcomes to be expected as a result of changes to the national health system. The policy will cover the partnerships and relationships necessary to achieve national health goals through integrated health care. It will make the necessary resources available in an equitable manner.
- *Building a consensus for political action and for the development of a legal framework to support the integrated health system infrastructure.* A statement of political commitment can be followed by a public debate which will modify the original ideas and engage other sectors, especially nongovernmental organizations, universities and professional groups. The media should be involved in facilitating this public debate, and it is essential to involve and motivate health care providers, pharmaceutical suppliers, funders and key leaders. Advocacy is also needed to build support for integrated health systems. Mechanisms must be found for the dissemination of the lessons learned (both positive and negative) in the implementation of integration.

8.2.2 *Assessing the condition of the district health system*

The assessment is carried out district by district according to established criteria but allowing for differences between districts. The data collected will provide baseline information on conditions in the district health system for a national report on the status of the district. This assessment can be used as a basis for remedying obvious deficiencies in buildings, equipment, supplies and personnel. It should be disseminated to all sectors involved in the formulation and development of the health plan. A system for monitoring physical conditions in the district health system will be useful in the future for maintenance and capital development programmes.

8.2.3 *Building the capacity to operate the district health system*

The district health system must:

- guarantee the availability of essential equipment, facilities and personnel;
- provide essential technical and managerial training;
- develop indicators and a system for monitoring quality.

8.2.4 *Introducing organizational and structural change*

The introduction of change may involve reorganization at the central level to support policy implementation, including decentralization.

Change will be needed to give district health systems the authority and responsibility for planning and implementing a local health programme based on local needs and priorities. This implies:

- providing the necessary financial resources;
- requiring accountability for the implementation of programmes, including staff management;
- encouraging involvement of the community in the management of the district health system using local mechanisms.

8.2.5 *The use of health systems research*

Health systems research will be required:

- to improve district management and technical capacity through operational and action research with communities;
- to establish a health monitoring system to support integrated health care delivery;
- to look at the influences of socioeconomic and cultural factors in health care delivery in the district and to use these influences to readjust and strengthen support systems such as planning, information, training and supervision.

Resources to support this research and the subsequent modification of planning systems may need to be sought outside the district, from the central level or from donors.

8.3 Guidelines for a district strategy and plan of action

A fragmented approach to health care runs counter to the health needs of the population. There must be a concerted effort to implement an integrated health system at district level which is responsive to the district's needs and provides equitable and comprehensive care. Several elements need to be present if this effort towards integration is to make progress.

- A local vision is needed within a national plan which recognizes the value of shared activities in improving district development.
- Some form of intersectoral development council or committee is required to serve as a forum for learning and planning together. The concept of the "learning district" (see 8.3.2 below) is useful here, since it provides for the improvement of managerial skills and the encouragement of health systems at district level.
- Factors which promote or hamper integration at the district level must be assessed. This should involve an analysis of the strengths and weaknesses of all district systems (both health and health-related) and identification of windows of opportunity. The assessment will include:
  - needs assessment, in partnership with the community, with reference to its main health problems and resources, as a basis for further partnership in planning priority-setting and decision-making;
  - assessment of personnel needs at district level, including an assessment of their training needs in terms of planning and technical and administrative preparation for integration.

8.3.1 *Strengthening the district organizational structure*

Some part of the district structure must be able to plan, implement and evaluate the district health system. This calls for strong leadership with the responsibility and authority to make decisions, notably on funding and personnel transfers. Clear job descriptions must be available for all district-level staff. There must also be clear mechanisms, including indicators, for quality assurance.

8.3.2 *Human resources development*

Every district should be transformed into an integrated learning unit which will build inspiring leadership and a functional district team. Training will take place both inside and outside the district, as appropriate. There must be training of trainers for integrated health care.

There will be a need for accounting skills at the district level. Accounting must be as open as possible. Moreover, in order to create a district-friendly information system, capacity-building may be necessary to ensure that the district information system (a) is relevant to the district's needs, (b) provides feedback to the person collecting the information and (c) provides information which leads to action. The information collected must be both quantitative and qualitative.

8.3.3 *Building physical capacity*

There may be a need also for building physical capacity (i.e. the construction of facilities, etc.). There must be mechanisms which allow support for such capacity-building to come from national level and possibly even from WHO.

Lobbying of local political leaders will be necessary to convince them of the value and advantages of an integrated district health system.

8.3.4 *Networking*

In addition to networking within the district through district-level committees, relevant nongovernmental organizations and agencies at district level must be actively encouraged to participate in learning, planning and implementation through district development committees. Political party representatives must be involved where appropriate. There should also be networking between districts, for instance through a national newsletter. There may be occasional interdistrict meetings for the sharing of information.

Ten steps to be taken at national and district levels in order to work towards an integrated district health system are listed in Box 4 on pages 42 and 43.

Box 4
Ten steps towards an integrated district health system

National level	**District level**

1. Clear long-range vision

Develop a national vision leading to a national policy on integrated PHC.	Translate this vision into a functioning integrated district health system (DHS).

2. Political commitment

Build a national consensus for political action by lobbying political leaders.	Convince local political leaders of the value of an integrated DHS.

3. Legal framework

Prepare and pass a public health law enhancing a decentralized DHS.	Implement this law at the local level.

4. Assessment of current situation

Consolidate all district assessments of current situation in district health systems.	Assess enabling and disenabling factors for integration in each district. Assess, with community, current health status problems, resources and needs.

5. District capacity-building

Build a national facilitating team that will inspire each district and initiate district capacity-building. Encourage use of WHO's integrated learning materials.	Transform each district into an integrated learning district that builds high-quality leadership. Build management, accounting and health information skills. Renew health facilities.

6. Renewal of organizational structure

Reorganize central level to support policy implementation.	Organize district structure to equip it for local planning, implementation and evaluation of DHS. Introduce a district-based information system.

7. Accountability

Train central audit team to carry out annual audit of finances and output.	Establish a local forum for clear accountability to the community of district health activities. Establish an open accounting system at the district level.

Box 4 (*continued*)

National level	District level
8. Building networks	
Build up national networks with donors, agencies and nongovernmental organizations (NGOs) and negotiate integrated planning, reporting, monitoring and evaluation. Establish a national newsletter to link districts.	Build up a district network with sectors other than health, NGOs and agencies through district development committees.
9. Comprehensive quality assurance	
Develop a national comprehensive quality assurance policy.	Introduce a problem-solving cycle for quality assurance, thereby fostering an integrated approach to problems and quality issues.
10. Health systems research	
Initiate action to establish national health systems research.	Initiate action research with communities to establish a health monitoring system to support integrated health care delivery.

Acknowledgements

References

1. *Methodology of planning an integrated health programme for rural areas: second report of the Expert Committee on Public-Health Administration.* Geneva, World Health Organization, 1954 (WHO Technical Report Series, No. 83).

2. *Integration of mass campaigns against specific diseases into general health services: report of a WHO Study Group.* Geneva, World Health Organization, 1965 (WHO Technical Report Series, No. 294).

3. *Primary health care: report of the International Conference on Primary Health Care, Alma-Ata, 6–12 September 1978.* Geneva, World Health Organization, 1978 (Health for All Series, No. 1).

4. Rifkin SB, Walt G. Why health improves: defining the issues concerning "Comprehensive Primary Health Care" and "Selective Primary Health Care". *Social science and medicine,* 1986, 23(6):559–566.

5. *Report on the Consultation on Operational Issues in the Transition from Vertical Programmes towards Integrated Primary Health Care, New Delhi, India, 4–12 June 1984.* Geneva, World Health Organization, 1985 (unpublished document SHS/85.5; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

6. Murray CJL. Quantifying the burden of disease: the technical basis for disability-adjusted life years. *Bulletin of the World Health Organization,* 1994, 72(3): 429–445.

7. *Better health in Africa.* Washington, DC, The World Bank, 1993 (Report No. 12577AFR).

8. *Implementing the Global Strategy for Health for All by the Year 2000: second evaluation: eighth report on the world health situation.* Geneva, World Health Organization, 1993.

9. *World development report 1993: investing in health.* New York, Oxford University Press for the World Bank, 1993.

10. Janovsky K. *The challenge of implementation. District health systems for primary health care.* Geneva, World Health Organization, 1988 (unpublished document WHO/SHS/DHS/88.1/rev. 1; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

11. Guilbert J-J. *Educational handbook for health personnel.* Geneva, World Health Organization, 1987 (WHO Offset Publication, No. 35).

12. Mercenier P. *Operational problems encountered in the implementation of tuberculosis control programmes and need for health services research to solve them.* Geneva, World Health Organization, 1982 (unpublished document WHO/TB/82.136; available on request from Global Tuberculosis Programme, World Health Organization, 1211 Geneva 27, Switzerland).

13. Mercenier P, Prévot M. *Guidelines for a research protocol on integration of a tuberculosis programme for primary health care.* Geneva, World Health Organization, 1983 (unpublished document WHO/TB/83.142; available on request from Global Tuberculosis Programme, World Health Organization, 1211 Geneva 27, Switzerland).

Selected further reading

Abbat F. Personal development and training. In: Streeftland P, Chabot J, eds. *Implementing primary health care: experiences since Alma-Ata.* Amsterdam, Royal Tropical Institute, 1990.

Allmann J, Rohde J, Wray J. Integration and disintegration, the case of family planning in Haiti. *Health policy and planning,* 1987, 2(3):236-244.

Amonoo-Lartson R et al. *District health care: challenges for planning, organization and evaluation in developing countries.* London, Macmillan Press, 1984.

Barcelon MA, Hardon A. The community-based health care programme of the rural missionaries of the Philippines. In: Streeftland P, Chabot J, eds. *Implementing primary health care, experiences since Alma-Ata.* Amsterdam, Royal Tropical Institute, 1990.

El Bindari-Hammad A, Smith DL. *Primary health care reviews: guidelines and methods.* Geneva, World Health Organization, 1992.

Gish O. Malaria eradication and the selective approach to health care: some lessons from Ethiopia. *International journal of health services,* 1992, 22(1):179-192.

Gonzalez-Block M et al. Health services decentralization in Mexico: formulation, implementation and results of policy. *Health policy and planning,* 1989, 4(4): 301-315.

Heywood A. *Primary health care in the Atacora Benin: success and failures.* Amsterdam, Royal Tropical Institute, 1991.

Implementation of the Revised Malaria Control Strategy in the South-East Asia Region of the World Health Organization: report of a regional working group meeting, New Delhi, 22-26 March 1993. New Delhi, WHO Regional Office for South-East Asia, 1993 (unpublished document SEA/MAL/178; available on request from WHO Regional Office for South-East Asia, New Delhi 110002, India).

Johnson K et al. Community based health care in Kibwezi, Kenya: 10 years in retrospect. *Social science and medicine,* 1989, 28(10):1039-1051.

Macdonald JJ. *Primary health care: medicine in its place.* London, Earthscan, 1993 (chapters 3, 4, 6).

Macmahon E, Barton E, Piot M. *On being in charge: a guide to management in primary health care.* Geneva, World Health Organization, 1992.

Maglacas AM. Health for all: a framework for action. *Philippine journal of nursing,* 1984, 54(3):78-97.

Morgan C, Murgatroyd S. *Total quality management in the public sector.* Buckingham, Open University Press, 1994 (chapters 1, 3).

Morgan L. *Community participation in health: the politics of primary care in Costa Rica.* Cambridge, Cambridge University Press, 1993.

National Meeting on the Coordination and Integration of Health Programmes and Services in Ghana, 14-16 January 1991, Sagakope, Volta. Geneva, World Health Organization, 1991 (unpublished document; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

Nitayarumphong S. Evolution of primary health care in Thailand: what policies worked? *Health policy and planning,* 1990, 5(3):246-254.

Paine LHW, Siem Tjam F. *Hospitals and the health care revolution.* Geneva, World Health Organization, 1988.

Primary health care towards the year 2000. A report of the Consultative Committee on Primary Health Care Development, Geneva, 9-12 April 1990. Geneva, World Health Organization, 1990 (unpublished document; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

Priority setting and the integrated delivery of health care. Geneva, World Health Organization, 1994 (unpublished document WHO/SHS/DHS/94.8; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

Programme on Strengthened Ministries of Health: framework for study process on improving health and health care through appropriate integration. Geneva, World Health Organization, 1989 (unpublished document WHO/SHS/NHP/89.3; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

Review of the Expanded Programme on Immunization in the People's Republic of China, 11-30 March, 1991. Manila, WHO Regional Office for the Western Pacific, 1991 (Document WP/CHD/ICP/EPI/001-E, Report series RS/91/PR/01 [CHN]).

Strengthening ministries of health for primary health care. Geneva, World Health Organization, 1984 (WHO Offset Publication, No. 82).

Strengthening ministries of health for primary health care. Report of a WHO Expert Committee. Geneva, World Health Organization, 1988 (WHO Technical Report Series, No. 766).

Strengthening primary health care from the district. Geneva, World Health Organization, 1983 (unpublished document SHS/83.8; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

Subedi J. Primary health care and medical pluralism exemplified in Nepal: a proposal for maximizing health care benefit. *Sociological focus,* 1992, 25:321-328.

Tarimo E. Towards a healthy district; organizing and managing district health systems based on primary health care. Geneva, World Health Organization, 1991.

Tarimo E, Creese A. *Achieving health for all by year 2000: midway reports of country experiences.* Geneva, World Health Organization, 1990.

Taylor C, Parker R. Integrating primary health services: evidence from Narangwal, India. *Health policy and planning,* 1987, 2(2):150-161.

The strengthening of comprehensive health care systems in districts. Report of an interregional consultation. Geneva, World Health Organization, 1994 (unpublished document WHO/SHS/DHS/94.10; available on request from Division of Strengthening of Health Services, World Health Organization, 1211 Geneva 27, Switzerland).

WHO Expert Committee on Leprosy. Sixth Report. Geneva, World Health Organization, 1988 (WHO Technical Report Series, No. 768).

Wlodarczyk C, Sabbat J. Regional integration of health services in Poland – an ambitious pilot project. *Health policy,* 1993, 23(3):229-245.

Annex 1
Country experiences[1]

The country studies below show that the main reasons for introducing integration included scarcity of resources, persistent health problems and/or increasing demand. The perceived benefits of integration ranged from more efficient use of health resources, through sustainability or a better response to the needs of the population, to community health development.

The process of integration was more successful if it enjoyed a strong political commitment and failed when senior decision-makers did not support it. In order to achieve integration, a consensus among decision-makers at different levels is required. Also, the establishment of a process of dialogue with community-based organizations proved to be essential for integrated health development.

The particular approaches and/or strategies used in developing integration vary from one country to another. Some countries integrated their own vertical programmes, hospitals and area-based planning before attempting coordination with other health-related services such as the private sector, nongovernmental organizations and other government agencies. Other countries have based their integration on comprehensive local-government planning. The subsections below show the various integration strategies adopted by different countries.

1. Integrating health and other sectors in development efforts

The "basic minimum needs" approach was implemented effectively in Thailand as part of an intersectoral local government approach to addressing the problems related to health development in a community. The role of the health service was to provide the health component of the programme by training village workers in simple health promotion, prevention and symptomatic treatment in the context of the overall programme. This approach proved sustainable only when local government adopted a major role in initiating and coordinating cross-sectoral activities at the community level.

2. Integrating planning processes

Microplanning as adopted in Indonesia involves the preparation of operational plans by health centre staff in consultation with the community. These plans attempt to integrate services for such areas as child health and women's health. This rational approach to the integration

---

[1] These accounts of country experiences in health service integration were prepared by local observers familiar with the situation in the countries concerned. The original texts were revised for presentation to the Study Group and have also undergone editorial changes. They were used as background by the Study Group and therefore are included here. They do not necessarily reflect the position of WHO.

of health care delivery began in two provinces, was extended to 13 provinces in 1994, and eventually all 27 provinces will be involved. Improved health information systems to support this process are being developed in several districts. Existing data are being used in the current planning process but are reviewed at subdistrict level, at health centres and even at village level. The introduction of integrated planning at district level has met with reluctance on the part of some programme officers.

3. Integrating service functions

The "supermarket" approach initiated in the United Republic of Tanzania and now in use in several East African countries integrates all the essential health care requirements for mothers and children. The emphasis of this approach is client-oriented and it provides all treatment required at the time of the visit to the health facility, no matter where or at what level of service the client enters the system. This certainly has the advantage of convenience, avoiding repeated visits to the health centre, duplication of records and loss of health staff time in taking care of the same client. Sustaining such an approach required a major effort to change the training of health workers at the periphery as well as supervisory methods, work schedules and information and recording systems.

4. Integrating health care within community and family activities

A health systems approach initiated in the Philippines adopted a health development perspective in the integration of health care delivery. It attempted to link the community with the health system and maintain such a link through a joint monitoring system. The approach was not sustainable because it required major reorientation of structures, systems and procedures in the health system and because health development can take place only in the context of a community development programme.

5. Integration based on decentralization

English-speaking Caribbean

The island states of Antigua and Barbuda, Barbados, Dominica, Grenada, Jamaica, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, and Trinidad and Tobago, as well as mainland Guyana, inherited health services with a similar organizational structure at the time of their independence. These services were based on designated districts with a small hospital and one or more "health offices" served by a district medical officer. There were several strong vertical programmes, such as those for malaria, tuberculosis and sexually transmitted diseases.

The Caribbean health ministers have jointly endorsed the policy of local health systems (*sistemas locales de salud* or *SILOS*) proposed by the Pan American Health Organization/Regional Office for the Americas. All

48

the states have developed their district services and introduced integrated delivery of primary health care and various degrees of decentralization. The district hospital is part of this integrated district health system. The majority of the larger general hospitals remain separate from the district health system.

District health teams have been set up, with responsibility for local planning and management of health delivery and emphasizing health promotion. The development of information systems as a management tool at district level has been a fundamental element of the programme.

Countries are reducing the number of vertical programmes as their services are integrated into the district health system.

The basis of decentralization differs between states, taking the form of links with existing local government authorities in Jamaica and multisectoral regionalization in Guyana.

Chile

The experience of Chile provides an example of both decentralization and privatization of a national health service. Some of the problems described are to be expected when decentralization occurs without sufficient support from the central / regional level.

Over the last 40 years, the health service in Chile has experimented with important changes, which have been a result of frequent evaluations of health policies. The creation of a significant private health services sector as a consequence of the privatization policies of the military government in the 1970s is perhaps the most important change. Since then, Chile has started to encourage private "participation" by creating insurance institutions (ISAPRES). The responsibility for primary care was given to 325 municipalities, and the budget for primary care and approximately 50% of health staff were transferred from the national health service to local government. All these changes have produced some improvement; for instance, the insurance system, which nowadays covers 25% of the population, began to offer alternative forms of medical care more frequently. However, the change of orientation from public to private in the health sector was followed by a considerable deterioration of the public health infrastructure. Municipal governments, who received a budget based on the quantity — not the quality — of the services produced, encouraged the growth of predominantly curative services. In this particular case, decentralization affected the excellent preventive care which had traditionally characterized the Chilean health system.

In 1989, the newly elected government continued with the privatization policy, trying to correct the negative aspects of the previous reform. The initial level of integration between public and private services was very low. Very recently, some public hospitals have begun to offer private inpatient services in an attempt to attract a proportion of ISAPRES clients. In Valparaiso-San Antonio, one of the 26 regional health services

in Chile, all the sections, departments, divisions and units of the service have been involved in an initiative to create a model to improve, coordinate and control health service delivery in the region. After experience with management by objectives, it was decided to use a model based on quality management, involving teamwork, a participatory work environment and effective leadership.

Philippines

The district health system evolved from an attempt to expand the coverage and accessibility of health care to underserved or unserved municipalities and villages. This process began in the early 1980s with the creation of the integrated provincial health office, and services were later decentralized further to the district health office. The main feature of the reorganization was the integration of hospitals and public health offices. As a result, changes in the policies, procedures and organizational structures of the Department of Health were required.

Upon the implementation of primary health care in the late 1970s, bottom-up planning within the framework of the national health plan was introduced in order to involve the community. The problems encountered were: (a) lack of assistance from the chiefs of hospitals and the provincial health officers; (b) resistance of directors of vertical programmes to integration at district level; and (c) the need to revise the relevant administrative, operational and financial policies, guidelines and procedures.

The benefits obtained far outweigh the problems encountered. They are: (a) increased coverage and attainment of targets; (b) optimal use of resources; (c) better information and surveillance data; (d) improved relationship between hospital and public health workers and responsiveness and equity of service; (e) less duplication; (f) improved health status; and (g) more user satisfaction.

Sri Lanka

The experience of Sri Lanka shows how decentralization has led to integration of organizational functions and components. Information on the effects of this is lacking but the underlying assumption is that it will contribute to integrated health care delivery.

The process of decentralization of health services was initiated in 1954, when 15 divisions were established and financial and administrative authority was delegated to "superintendents". However, curative and preventive care continued to be compartmentalized, although curative health services did provide some elements of preventive care (e.g. antenatal, perinatal, postnatal, school health, health education and immunization).

In 1983, a first attempt was made to integrate curative and preventive health services by establishing divisional health centres designed to

deliver comprehensive integrated health care to a population of approximately 60 000 and by restructuring the existing health services for better management of PHC. Although officially recognized, the proposed restructuring did not, however, have the backing of all senior-level managers in the health system and was not allocated sufficient resources. Nevertheless, in a few areas where the divisional health officer was committed to preventive care, the system functioned adequately. The only lasting results of this experiment in restructuring health care delivery were the Gramodaya health centres managed by a resident family health worker.

In 1987, power was devolved to the provinces and responsibility for the management of most health activities was devolved to the provincial administration which, it was believed, could establish a system more responsive to local needs. However, almost six years of management by the provincial councils saw no major changes in the health care delivery system. The provincial councils tended to allocate more resources to curative rather than preventive health services. Resource allocation was sometimes influenced by political concerns. Instead of one set of decision-makers, as many as eight groups of people with different priorities and styles of management were directing the health care delivery system.

In 1992, further decentralization took place when the government decided to devolve power previously enjoyed by the provinces to the divisions. Divisional secretariats were then established. The Ministry of Health also decided to devolve its functions to this level and appointed divisional directors of health services to be in overall charge of both preventive and curative services within a division. These appointments took place at a time when more and more medical officers were available to the health sector. Within 10 months the number of medical officers involved in public health activities in designated health areas increased from 100 to 200.

The new structure should provide better integration of health care delivery at the primary care level and contribute, with other sectors, to health development and improved health status of the population. However, the success of this systematic integrated approach for health care delivery will depend in large measure on the support the new structure receives from the provincial and central levels, and on close monitoring of the activities undertaken at divisional level.

Zambia

In October 1993, the Cabinet adopted health reforms designed to ensure effective leadership, improved equity and sustainability, increased accountability, and the building of partnerships to provide and promote cost-effective and efficient health care. Decentralization has been identified as the key to the implementation of the reforms, with the district as the focal point for integrating health care. District health

personnel have been retrained and motivated to assume their integrated roles. Financial resources will be disbursed directly to the districts in future.

The population will contribute to the cost of health care through cost-sharing, payment in kind, prepayment and commercial schemes. The Government, through the Ministry of Community Development and Social Services, bears the costs of health care for poor persons. Sixty-eight per cent of the population are classified as poor and 54% as very poor. Social sectors have been consulted on the new mission and vision of the health sector, and an urban health policy has been developed after wide consultation.

As regards intersectoral integration and collaboration, a National Programme of Action for Children has been adopted, which aims to achieve the following targets using an integrated approach:

- reduction of infant mortality from 108 per 1000 to 65 per 1000;
- reduction of maternal mortality by 50% from the current rate of 202 per 100 000 live births;
- reduction of the fertility rate by a specified amount by the year 2000;
- promotion of universal access to the complete primary education cycle by the year 2000;
- reduction of the illiteracy rate;
- better water supply and sanitation for 50% of the rural population and 100% of urban households by the year 2000.

Other examples of integration involve other sectors, e.g. the integration of AIDS and human immunodeficiency virus (HIV) prevention and control programmes in all sectors and collaboration between social sectors and nongovernmental organizations to spearhead development in other health and health-related areas. In addition, health and health-related issues in 2000 women's groups are integrated with their income-generation activities. The programme of health reform is supported by multilateral and bilateral donors with whom regular consultations are held.

6. Integration of vertical programmes

Ghana

In 1991, the Ministry of Health of Ghana, in collaboration with WHO, held a national meeting on the coordination and integration of health programmes and services in Ghana. Among the problems identified was the lack of coordination between different health programmes. It was further noted that such coordination was influenced by the way the Ministry of Health was structured and organized, resources were allocated, and programmes were managed. The meeting was held to review what could be done to improve the problems caused by lack of coordination and by the presence of strong vertical programmes.

Ghana's vertical programmes included EPI and programmes on AIDS, control of diarrhoeal diseases / oral rehydration therapy, malaria, yellow fever / yaws, leprosy, tuberculosis, onchocerciasis, safe motherhood, family planning (FP), weaning foods, prevention of blindness and mental health. In addition to these vertical programmes, there were several other non-integrated services such as MCH/FP, health laboratory services, X-ray, blood transfusion and environmental sanitation.

This multiplicity of vertical programmes and services led to:

- duplication of effort, e.g. duplicated training programmes and visits between the regional, district and community levels;
- competition between programmes for resources (money, staff, etc.);
- lack of coordination between programmes and the Ministry of Health;
- slow implementation of programmes.

There was also very little improvement in the health status of the population, e.g. EPI targets were not reached, family planning acceptance remained low, maternal mortality rates were static. The first step taken was to allocate each of the vertical programmes to one of three functional groupings – PHC programmes, medical care services or mental health services.

The second step was to formulate a national health policy that described these functional groupings and the links between them as a single entity directed towards promoting an improvement in health status. The third step was to arrange all planning, budgeting, monitoring and evaluation activities according to the functional groupings. With this plan, the regions are expected to plan and implement programmes and assign divisional responsibilities according to the functional groupings. The same groupings will exist at the district level, with the leader of the district health management team coordinating PHC functional groupings. Staff at health-centre level are multipurpose workers with duties encompassing all the functional programmes.

Islamic Republic of Iran

In the 1960s, the transition of malaria control from a vertical programme to an integrated programme greatly influenced the development of health services throughout the country. The malaria eradication organization (MESI) was a truly vertical programme parallel to other departments of the Ministry of Health. It had a separate budget, the largest staff and covered almost the whole population. As health services in rural areas did not cover more than 50% of the rural population (by 1968 there were 1700 rural health centres and clinics to cover a rural population of about 20 million in 70 000 scattered villages), the Ministry of Health was reluctant to integrate malaria control into the health services.

The initiative for integration came from MESI, which undertook studies and set up case detection and surveillance services in health centres and clinics in several regions. Malaria microscopists were made available to

the rural health clinics and centres to take blood smears from people with fever, examine them on the spot and provide treatment. In addition, from 1968 to 1973 the Director-General of Malaria Eradication engaged and trained malaria health workers for immunization programmes and other disease control programmes to combat schistosomiasis and other endemic diseases. In 1972, the Ministry of Health, in collaboration with WHO and the School of Public Health of Teheran University, agreed to initiate a health services project in West Azerbaijan Province to train auxiliary personnel to serve its peripheral facilities. Malaria health workers became the backbone of field operations among those trained as male auxiliary health workers (*behvarz*), and the process of integration was further consolidated. Among the achievements of this project was the concept of establishing "health houses" and the training of auxiliary workers. This was adopted in developing the country's primary health care networks (*1*).

The Ministry of Health and Medical Education launched primary health care in the late 1970s. Since then, impressive results have been achieved: for example, infant mortality fell from 91 per 1000 live births in 1974 to 34 per 1000 in 1993, and maternal mortality was reduced from 140 per 100 000 live births in 1984 to 40 per 100 000 in 1993. The general fertility rate was also reduced from 3 to 1.6 children per woman.

The current health system in most of the 227 districts in the 25 provinces of the Islamic Republic of Iran is characterized by a training centre for the *behvarz*, a district directorate of health services and a network of rural health centres, health houses and urban health centres. The district hospital serves as the referral centre for both urban and rural health services. Each health house caters for a catchment area of about 1500, the average population size of most villages. At present, 20 000 *behvarz*, working in some 12 000 health houses, are the main PHC workers. The rural health centre caters for 9000 people on average and usually supports five health houses. The chief responsibilities of rural health centres are to support health houses and supervise their activities (i.e. referral), as well as maintaining proper contacts with higher levels of the health system.

Integration of PHC starts with the master plan, in which the workload of the health houses and health centres is estimated and staff allocated accordingly. Detailed task analyses for the health houses and rural centres are undertaken in a comprehensive and integrated way. No recognition of vertical programmes is envisaged at this level. Priority areas are detailed and tasks are assigned to the health house level or to the rural health centre level, as well as to the district hospital.

Training of *behvarz* is done at the district level. The detailed task analysis conducted by the central level within the terms of reference of the health houses and health centres forms the basis of the training curriculum. In this way, the *behvarz* receive an integrated training based on the integrated tasks to be performed. Supervision by the Directorate of Health Services and by the health centres enforces the concept of

integration even further. Continuing education is linked with supervision and takes the form of regular short refresher courses at the district training centre. Managers of vertical programmes are not involved in training at the health house level. They function as resource persons at the central level to advise and monitor progress.

The use of information by health workers is a good example of integrated health care. The activities are depicted on a wheel-like shape called the "vital horoscope". Major activities like family planning, registration of births and deaths and demographic information are always on display in the health house. Major causes of death are also displayed. The triad of integrated health care, comprehensive supervision and a comprehensive information system ensures the sustainability of integrated primary health care.

The political commitment to integrated PHC at the district level is shown by:

— preferential resource allocation in favour of PHC;
— the law promulgated in support of *behvarz* recruitment and career development;
— clear vision and continued commitment in the planning of PHC.

The Ministry has a fixed policy of striving towards equity by standardizing the catchment areas of the health houses and health centres.

For integrated PHC to be sustainable, it has to prove its credibility. The experience of the Islamic Republic of Iran has shown that the PHC system has accomplished a great deal in improving health status and drastically reducing infant mortality, maternal mortality and general fertility. It has also proved useful to other sectors by supporting their major activities: accurate, up-to-date census data and vital statistics are always found at the health houses, and activities in support of schools, housing schemes and the environment in general contribute greatly to the efforts of municipalities and the Ministry of Education.

Mexico

Mexico covers 2 million square kilometres and has 90 million inhabitants: 70% in urban areas and 30% in rural areas. Forty per cent of the population live in cities of more than 1 million people, and 10% live in more than 100 000 villages of fewer than 100 people, 60% of them isolated and without a health infrastructure.

The national health system, directed by the Health Secretary, includes social security institutions with 60% coverage of the salaried population. Private medicine provides care for 5–15% of well-to-do people. Under federal, state and municipal regimes, the Health Secretary guarantees preventive, curative and rehabilitative services for 25–35% of farmers, small-business owners, unemployed persons and the destitute.

Mexico has accepted the goal of health for all by the year 2000 and the objectives of the World Summit for Children. The health system is geared

around PHC in 15 000 health centres, with referral to 650 hospitals. There are 1.2 physicians and 1.6 nurses per 1000 inhabitants. The national health and social security services are integrated on a functional basis.

Examples of vertical programmes are: (a) universal vaccination, with more than 95% of children under five years of age being immunized with the EPI vaccines (this high coverage was obtained through national vaccination days and weeks, house and school visits, mopping-up operations and the participation of 600 000 volunteers); and (b) the onchocerciasis programme, which operates vertically, visits biannually up to 18 000 patients in three foci in the south-western states. People affected are provided with ivermectin, a microfilaricidal drug, and skilled technicians remove subcutaneous nodules containing adult worms.

Examples of integrated programmes are those for control of diarrhoeal diseases and malaria control, which are decentralized and operated by PHC personnel. They enjoy the full support and acceptance of communities, which report and attend health centres and receive drugs, oral rehydration salts and information and training on the proper handling of cases.

United Republic of Tanzania

The health care objective in the United Republic of Tanzania is to make available to the whole population, especially the vulnerable groups of mothers and children, a comprehensive and integrated system of health care. The MCH programme, based on a chain of rural dispensaries and health centres and run by specially trained, multipurpose MCH aides, is the core of the service. Most people are within 5-10 km of a health facility.

The current MCH programme was launched in 1974, following a pilot study in three districts – Bagamoyo, Dodoma and Moshi. The old clinic pattern of providing separate components of MCH services on different days of the week was abolished. The following services were integrated and provided on a daily basis: antenatal and postnatal care, normal deliveries, early detection and correction of malnutrition, immunization of children and expectant mothers, malaria suppression, contraceptives, health education on personal and environmental sanitation, and treatment of common minor diseases. Consequently all mothers and children attending any frontline health facility, whether a dispensary or a health centre, for any reason, will encounter the full range of MCH services. Mothers are encouraged to bring with them all their children under five years of age at each visit.

The advantages of this approach are more efficient use of staff, the opportunity to introduce clients to the full range of MCH services, and convenience to clients, some of whom previously had to walk more than 5 km for antenatal care and return two days later to bring a child for nutritional surveillance.

The problems encountered included staff reluctance as they feared an increase in workload. However, once the new approach was operational, it became clear that there was no additional work. The pilot project developed solutions to operational issues, including options for organizing the flow of services. New dispensaries and health centres were constructed in a way that facilitated the delivery of integrated MCH services. Finally, 18 schools for MCH aides were started to ensure that all dispensaries and health centres would have trained workers five years later.

To support the programme, MCH coordinators are deployed at district, regional and zonal levels. To plan, organize, coordinate and lead the programme, a central MCH unit and an MCH coordinating committee — which includes representatives of the Ministry of Health, UMATI (the family planning organization) and a women's organization — were established. The new approach resulted in a rapid expansion of coverage with services, particularly immunization. The experience in the United Republic of Tanzania has been of interest to other countries and the integrated approach is now being implemented by a number of African countries under the slogan "supermarket". In the United Republic of Tanzania itself the approach has been threatened by the tendency of some donor agencies to support only selected components of MCH, particularly EPI, but has in general managed to survive.

7. Integration of nongovernmental organizations' health services with those of government

Indonesia (2)

Indonesia consists of five major islands and about 30 smaller island groups. These geographical conditions have had an adverse effect on infrastructure development and hampered supervision, monitoring and referral, and other aspects of health service development. Though economic growth over recent decades has been impressive, most people have low incomes and their ill-health is still related to their poverty.

In order to solve these problems and to improve health standards, greater emphasis had to be placed on appropriate technology and community participation. In 1979, an innovative approach was developed by the Family Welfare Movement in close collaboration with government health services: the integrated community health post or posyandu. The posyandu is a health service unit provided by the community for local people and supported by the health centre staff. The unit provides five basic programmes: family planning, MCH, nutrition, immunization and diarrhoeal disease control.

This village health programme dates back to the establishment in 1976 of weighing posts (pos timbang) for children under five years of age in rural areas of Java. There were also other health services, such as the family planning post, general health post and vaccination post — all managed and

controlled by the community using voluntary workers and assisted by health centre staff. Since all these posts had the same target population (mothers, infants and older children) it was decided that they should be integrated and offered in one place at one time at the *posyandu*. Sponsored by the Ministries of Health, Agriculture and Religion and the National Family Planning Coordinating Board, the *posyandu* is supported and visited by health centre staff and is formally under the responsibility of the Ministry of Home Affairs. The *posyandu* system utilizes a large number of voluntary workers, most of whom are married women aged 20–40 years with a primary-school education. They are affiliated to the Family Welfare Movement and selected by the village head without the assistance of the local village council. Members of the *posyandu* include pregant women, nursing mothers, mothers with children under five and married women of reproductive age. There is a *posyandu* in every community of at least 120 households.

United Republic of Tanzania

The following case describes the first steps in the process of integrating a nongovernmental organization into government services in a district in the United Republic of Tanzania. It also illustrates the clash between two approaches in health care delivery: bottom-up (nongovernmental organization) and top-down (government) and how these approaches contribute to establishing dialogue with local communities.

Isingiro dispensary was built by Rulenge diocese in 1961 in Karagwe district in the north-western corner of the country. Nearby the government also ran one health centre and five dispensaries in an administrative division made up of 24 villages of about 50 000 people. During the 1960s and 1970s, there was little cooperation between the various health facilities and the Isingiro dispensary, which had beds for inpatients, functioned almost independently with its own personnel, resources and funds, and with its own approach to health care. The impetus for change came when PHC activities were initiated by Isingiro in 1985. Cooperation with the government, community and other sectors became an important strategy in order to achieve more comprehensive health care delivery. In 1986, the District Community Development Department started a PHC programme in the division, as part of a UNICEF programme. Lack of coordination between this government programme and Isingiro and differences in approach (top-down versus bottom-up) initially led to problems. At one stage, three parties (the district health department, the community development department and Isingiro health centre) were involved in the village health services without consulting each other and without any formal structure for communication. Intensive dialogue at the district and regional levels resulted in an agreement for cooperation.

In 1987, an intersectoral team representing both the government and the nongovernmental organization was established, consisting of one medical

officer (chairman of the team), a rural medical aide, a nurse/midwife from Isingiro, the ward health officer and the ward community development officer from the government. That was the beginning of a long process of integration. After assessing priorities with village leaders, a divisional primary health care plan was developed, intersectoral ward development committees were strengthened, and village health committees were trained. Three main principles were established: (a) the community should be taken as a starting-point and problems raised by villagers should be taken seriously; (b) the programme should be flexible and should allow government PHC guidelines to be adapted to the local situation; and (c) long-term goals should be set.

Integration with government programmes has intensified progressively, although several issues remain to be addressed. Integration at divisional level has been sustained by shared objectives, shared use of resources, common interests and a positive response from the community and the intersectoral committee at ward level. The small scale of the operation at divisional level in this case has certainly favoured the process. During the process of integration, the following changes were perceived in the health system: efficiency increased as duplication of programmes was avoided, some resources (e.g. staff) were shared and joint budgeting was instituted for some activities. Services were reoriented from curative activities to preventive outreach and preventive/promotive health-related activities. Effectiveness of health care interventions may have improved as programmes increasingly took account of the population's own perceived needs and participated in joint planning initiated by the establishment of the divisional intersectoral PHC team.

8. Integrated planning of comprehensive health services

Botswana

Local governments have always played a role in health. However, their role has become much more important with the recent trend towards decentralization by governments and ministries of health. The experience of Botswana illustrates this. An integrated approach was taken, with the advantage of sufficient resources which allowed the government to provide free services (education, health, etc.) to the population. However, it is recognized that the negative side of this approach — the dependency and passive "recipient" attitude of communities — needs to be addressed.

Comprehensive health planning in Botswana essentially dates back to the early 1970s. As in so many countries, the scenario after independence in 1966 was that of rudimentary health services in a poor developing country. This situation changed in 1971, when the opening of the mines boosted government revenues: a "Programme of Accelerated Rural Development" was defined by the government as the general strategy for development. Health care was to be an integral part of that strategy. From the very beginning, decentralization and intersectoral collaboration were

considered essential for health and development and for stimulating communities to take an active part in their own development. The creation of a strong local government system (district councils) was one of the first steps taken to achieve these aims. Integrated planning at district level was achieved through the district development committee which, together with structures such as the village development committees and the national rural development council, formed the pillar of the rural development strategy.

Over the period 1965-1990 the rate of growth of Botswana's gross national product per capita was 8.4% per year. The resources obtained from the sustained economic growth of the 1970s and 1980s were used to develop a social infrastructure and provide services to the majority of the people. These services are provided through the local government system, which is made up of district and town councils. Continuous economic growth enabled the central government to provide sustained funding to district councils, which enabled the latter to provide reliable services to communities — often without cost to the consumer. The fact that the health infrastructure and health system were rudimentary at the time of independence partly explains the relative lack of resistance to the development of this integrated PHC approach.

Finland

In Finland, local governments (municipalities) have a key role to play in welfare sectors such as education, social services and health. There are 450 municipalities, with an average population of 6000.

Around 1970, the health system was dominated by a strong, highly developed hospital sector, separated administratively into general, tuberculosis and psychiatric hospitals. Hospitals were managed by a total of 150 federations of municipalities. Primary care was poorly developed except in the flagship service, municipal MCH clinics run by public health nurses and midwives. However, a number of other elements of PHC were run as separate programmes by the municipalities. These were environmental health, school health and dental health, primary medical care, and community hospitals.

The Primary Health Care Act of 1972 brought together all these functions, as well as family planning services, to be delivered in 220 health centres administered by the municipalities. The Primary Health Care Act and the accompanying amendments to the Hospital Act laid the foundation for the integrated organization, planning and financing of PHC and for better coordination of hospital services, which were brought under a similar unified system of planning, budgeting and financing coordinated by 21 general hospital federations. Rolling national plans stipulated the amount of strategic resources (new personnel, investment and estimates of operational costs) entitled to state subsidies, which provided on average roughly one-half of the total funding of health services and left the other half to be financed from local taxes.

When the changes were first introduced in 1972, central control over strategic resources, aided by economic growth, political pressure and consensus, allowed more resources to be allocated to PHC, which is highly decentralized in terms of service delivery. Since 1979 there has been a systematic delegation of authority to the periphery, further integration within the hospital sector and partial integration between municipal social services and PHC. All these developments are aimed at better coordination and management of municipal welfare services to meet the needs of local people through a small-district population-based approach.

9. **Health integrated in community development**

Community health development involves interrelated activities aimed at raising health standards and general quality of life. The examples of Jordan and Thailand illustrate a community-centred approach. Health is seen as part and parcel of development, with people as the main actors and beneficiaries.

Jordan (3)

The case of Jordan indicates how basic minimum human needs are addressed through a process of health promotion. In this case the mechanisms are determined by the community and supported by the government and a nongovernmental organization. In 1989, Jordan embarked on the implementation of an integrated socioeconomic programme based on the "basic minimum needs" approach. The project is being executed by a nongovernmental organization (the Noor Al Hussein Foundation), in collaboration with several government ministries from the social and economic sectors. It provides financial and technical assistance in 12 villages. A strong political commitment, followed up by advocacy and intensive social and community preparation, organization and training, has assured its success. Social and income-generating projects have been initiated, including all the components of PHC. There has been a substantial improvement in the quality of life of the people and a change in their attitudes: they have assumed their full role in the planning and implementation of their development. So far, improvements in quality of life have been related to housing, availability of sanitary toilets and a reduced need for PHC services as a result of better health.

Thailand (4)

In Thailand, integrated development has been in existence for many years. Communities played a significant role in the development of health care in Thailand even before the Declaration of Alma-Ata. Initially the role of communities extended only to the provision of health services but gradually communities were trained and supported in assessing their problems through surveys at village level and developing their own

strategies to solve these problems and meet basic needs. This process was carried out in collaboration with officials from four main ministries, including the Ministry of Health. Quality of life was used as a tool for community participation in local development, with health as an integral part. In 1993, the Ministry of Public Health introduced an intensified project for health for all and quality of life in all the provinces. One of the problems, however, was the high turnover rate of existing voluntary workers at village level.

10. Integration of hospital and community

Haiti (5)

In this case, a hospital which had initially focused exclusively on curative care became a centre for health development by establishing a partnership with community-based organizations. Integration of several organizational components was necessary. The Albert Schweitzer Hospital in the Artibonite Valley district of central Haiti was set up in the mid-1950s to provide curative services to a population of 175 000. Gradually, concern grew about the causes of diseases treated in the hospital. This resulted in efforts to develop drinking-water systems and build latrines in the villages throughout the district. Early in 1977, it was decided to consider the health needs of the population in the valley and to integrate curative, preventive and promotive health programmes. A community health department was created and a network of seven dispensaries and a mobile team for immunization were added to the existing hospital. After a PHC review in 1987, which emphasized the lack of resources to tackle substantial health problems and the apparent lack of effectiveness of current medical care, a completely new way to raise the health standards of the people was devised. It was decided to promote the concept of a healthy life, rather than merely treating people who were already ill or preventing specific diseases.

Community health programmes should be simple and inexpensive in accordance with available resources. They should be adapted to local needs and should be integrated into a wider programme which also aims to improve other aspects of community life, such as food, water and shelter. In the Haitian context, it was clear that it would be difficult to involve the community in health programmes, or any other community development programmes for that matter; hence a cautious, step-by-step approach was used. A village development committee was established, whose members were elected by the community. Voluntary health workers (*animatrices*), in charge of 15-20 families, were elected or selected from among the mothers and were trained in health promotion activities. In collaboration with health agents (the lowest grade of dispensary staff), the *animatrices* delivered to the families a minimum health care package – maternal and child health care, family planning, immunization, treatment of simple diseases, health and nutrition education and environmental sanitation. A prepaid health scheme was

established to finance the minimum health care package, with a small standard contribution per family. Within two years, there was a markedly beneficial effect on health status, most significantly in children aged under five years and their mothers. Also, changes were evident in the health knowledge, attitudes and practices of the population.

References to Annex 1

1. *Primary health care in the Islamic Republic of Iran.* Teheran, Ministry of Health, 1993.

2. Soemartono K et al. *Health development structures in district health systems. Indonesia case study.* Surabaya, Health Services Research and Development Centre, 1994.

3. *Report on the intercountry consultation on accelerating the basic minimum needs approach in the Eastern Mediterranean Region.* Amman, WHO Regional Office for the Eastern Mediterranean, 1993.

4. *Target of health for all in Thailand.* Bangkok, Ministry of Public Health, 1994.

5. Nugroho G. Partnership for community health development. *World health forum,* 1993, 14(2):168–171.

Annex 2
Examples of integration in WHO activities

AIDS

Integration has gradually become a feature of many national AIDS programmes as well as WHO's Global Programme on AIDS. In 1991, WHO decided to merge its two programmes on AIDS and sexually transmitted diseases. It has now been decided that the HIV/AIDS activities of the following organizations should be combined: WHO, the United Nations Population Fund (UNFPA), UNDP, the United Nations Educational, Scientific and Cultural Organization (UNESCO), UNICEF and the World Bank. In particular, at country level these activities will be structured as one programme working together with various ministries and non-governmental organizations.

Over the past few years, many ministries of health have successfully incorporated other sectors into HIV prevention and AIDS care. In Zambia, for example, principal secretaries of all ministries have developed and budgeted for specific prevention or care activities in their respective annual plans for health, social welfare, education, defence and so on.

At the service level, district planning for AIDS-related activities by health and social staff has linked responsibilities for prevention and care when dealing with people living with HIV, their families and their communities. Home care programmes are one example of a service which initially concentrated on AIDS; nowadays, however, many chronic diseases, such as tuberculosis, and other household health issues are integrated into home care programmes. Thus they can be dealt with by the same village health workers and can be supported by various community-based structures – the church, women's groups or nongovernmental organizations.

Control of diarrhoeal diseases (CDD)

Although WHO acknowledges the benefits of programme integration in this area, it advocates that a strong national team should remain responsible for coordination, policy guidance and allocation of technical resources and provide technical support for the CDD programme in regions and districts. The best possible programme for integration with CDD is considered to be MCH; alternatively, CDD activities could be integrated with those in the field of epidemiology. Other suitable areas for integration are training, evaluation, monitoring, communications and supplies. Quality of service, efficiency and cost-effectiveness must be maintained. A number of WHO activities, including CDD, are being coordinated in the development of the Sick Child Initiative.

Emergency and humanitarian action

In the event of emergencies or disasters, WHO's vast technical network provides expert advice to Member States on epidemiological surveil-

lance, control of communicable diseases, public health information, health emergency training, etc. Emergency relief activities include limited provision of emergency drugs and supplies, emergency assessment missions and technical support. WHO's emergency preparedness activities include coordination, policy-making and planning, awareness-building, technical advice, training, publication of standards and guidelines, and research on emergency preparedness issues. The main objective is to strengthen the national capacity of Member States to mitigate the adverse health consequences of emergencies and disasters. These activities are integrative and equity-based and support WHO's goal of health for all by the year 2000.

Expanded Programme on Immunization

The EPI strategy "EPI for the 1990s" (1) calls for the Programme's cooperation with other programmes to strengthen the health care infrastructure through better integration of immunization into PHC. Integration is to be achieved through training and evaluation linked with other MCH programmes and by active promotion through EPI of other interventions, such as micronutrient supplementation. The strategy further calls for establishment of a committee at national level to coordinate other PHC activities and help ensure the best use of resources, through integration of the logistics, transport, supervision and maintenance systems of all programmes.

Leprosy

In 1986, a WHO consultation on implementation of leprosy control through PHC (2) recommended practical steps for integration of the programme into district health services. It emphasized the need for planning the process of integration, the training of district health staff in management and the inclusion of leprosy studies in the basic curricula of medical faculties. The consultation also highlighted the need to integrate reporting systems, while acknowledging the need to simplify data requirements and conduct action-oriented research on ways of improving decision-making.

In 1988, WHO sponsored a consultation on leprosy control within urban PHC in Alexandria, Egypt (3). It was stated in this consultation that WHO recognizes the importance of integrating leprosy services within the PHC system because this will reduce the stigma associated with the disease and improve compliance with treatment. The consultation recommended the introduction of specialized leprosy programmes to support referral, technical supervision, coordination, evaluation and training. The consultation emphasized the need for intersectoral efforts between the ministry of health, other ministries and sectors such as social welfare, labour, home affairs, education, city health services and nongovernmental organizations.

Malaria

In 1983, a Study Group on malaria control as part of PHC (*4*) recommended the integration of malaria control activities into the general health services. The Study Group called for a pragmatic approach to this process, taking into consideration the prevailing epidemiological status, available resources and community interests. The Global Strategy for Malaria Control, adopted by the Ministerial Conference on Malaria in 1992, emphasized that control must be an integral part of health systems and must be coordinated with relevant development programmes in nonhealth sectors (*5*). It calls on communities to be full partners in all control activities. It adds, however, that while disease management should be progressively transferred to general health services, vector control should not suffer as a result. The strategy also states that a number of other tasks, including supporting the quality of laboratory diagnosis, training and assisting in the collection and consolidation of epidemiological information, require specialized rather than multipurpose staff.

Maternal and child health

Practical considerations for integrating MCH services with PHC are clearly outlined in a book released by WHO in 1990 (*6*). This provides guidelines on how to organize, manage, implement and evaluate MCH services, including family planning, in the integrated system at different levels. It emphasizes that community and family self-reliance should be given high priority. The roles of community, health centre, district and national levels are also outlined.

Tuberculosis

Tuberculosis control is an example of a programme with a long history of efforts at integration. Table A outlines such efforts with special reference to the national tuberculosis programme in India and indicates how the path to integration is not always a smooth one.

A WHO consultation in 1986 provided guidelines on integrating tuberculosis control into PHC services (*7*). The meeting pointed to the persistently high prevalence of tuberculosis in developing countries, requiring improved case-finding and case-holding methods. This could be achieved through integration of tuberculosis into the PHC services. This would, in turn, require health workers based in the peripheral health services to improve their skills in diagnosis and case management. The meeting emphasized that support from the district level was needed in order to maintain high standards among health workers. It also called on districts to plan the process of integration in the health services, including the assignment of responsibilities.

Vector biology and control

In 1986, a WHO Scientific Group on vector control in PHC stressed the importance of integrating vector control activities into the local health

Table A

A chronology of attempts to integrate tuberculosis control into general health services, with special reference to India[a]

1962	The national tuberculosis programme in India decided that the tuberculosis control programme should be integrated into the basic health services. This was a WHO-assisted programme.
1964	In its eighth report, the WHO Expert Committee on Tuberculosis endorsed integration as the policy for tuberculosis control (8).
1965	A report from an expert leaving the Indian project underlined some of the difficulties and issues to be resolved if an integrated tuberculosis control service was to be achieved.
1979	Various national experiences (the Philippines, Argentina and some African countries) suggested that integration was a difficult process and that case-holding of tuberculosis patients should be integrated with that of other patients. However, research was needed on the mechanisms of integration.
1981	A document prepared for the Study Group on Tuberculosis Control, Geneva, September 1981 (9) made proposals which were endorsed in the group's report (10). No consensus was reached regarding the meaning of integration.
1982	A research protocol on integration was prepared studying how to integrate tuberculosis programme activities into the basic health services.
1986	A WHO meeting provided a research protocol on integration of a tuberculosis programme and primary health care.
1987	WHO encouraged the National Tuberculosis Institute in India to apply the protocol, but the project did not raise sufficient interest to proceed.

[a] Source: P. Mercenier, personal communication, 1994.

system (11). It recommended appropriate training for health staff and use of available expertise from other vertical programmes. It also highlighted the importance of community participation as a source of information and the important role of nongovernmental organizations. Research and development are required to develop new activities, new tools and new methods for vector control in PHC.

References to Annex 2

1. *EPI for the 1990s.* Geneva, World Health Organization, 1993 (unpublished document WHO/EPI/GEN/92.2; available on request from Global Programme for Vaccines and Immunization, World Health Organization, 1211 Geneva 27, Switzerland).

2. *Report of a Consultation on Implementation of Leprosy Control through Primary Health Care.* Geneva, World Health Organization, 1986 (unpublished document WHO/CDS/LEP/86.3; available on request from Action Programme for the Elimination of Leprosy, World Health Organization, 1211 Geneva 27, Switzerland).

3. *Report of the Consultation on Leprosy Control within Urban Primary Health Care.* Geneva, World Health Organization, 1988 (unpublished document WHO/CDS/LEP/88.5; available on request from Action Programme for the Elimination of Leprosy. World Health Organization, 1211 Geneva 27, Switzerland).

4. *Malaria control as part of primary health care. Report of a WHO Study Group.* Geneva, World Health Organization, 1984 (WHO Technical Report Series, No. 712).

5. *A global strategy for malaria control.* Geneva, World Health Organization, 1993.

6. Hart RH, Belsey MA, Tarimo E. *Integrating maternal and child health services with primary health care. Practical considerations.* Geneva, World Health Organization, 1990.

7. *Tuberculosis control as an integral part of primary health care.* Geneva, World Health Organization, 1988.

8. *WHO Expert Committee on Tuberculosis. Eighth report.* Geneva, World Health Organization, 1964 (WHO Technical Report Series, No. 290).

9. Mercenier P. *Operational problems encountered in the implementation of tuberculosis control programmes and need for health services research to solve them.* Geneva, World Health Organization, 1982 (unpublished document WHO/TB/82.136; available on request from Global Tuberculosis Programme, World Health Organization, 1211 Geneva 27, Switzerland).

10. *Tuberculosis control. Report of a joint IUAT/WHO Study Group.* Geneva, World Health Organization, 1982 (WHO Technical Report Series, No. 671).

11. *Vector control in primary health care. Report of a WHO Scientific Group.* Geneva, World Health Organization, 1987 (WHO Technical Report Series, No. 755).