



*leprosy- precaution and control
 Primary health care*

REPORT OF A CONSULTATION ON IMPLEMENTATION OF
 LEPROSY CONTROL THROUGH PRIMARY HEALTH CARE

Geneva, 16-18 June 1986



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LIST OF PARTICIPANTS

BACKGROUND AND OBJECTIVES OF THE CONSULTATION

Integration of leprosy control and care for leprosy patients into the primary health care (PHC) system is making difficult and slow progress in most endemic countries.

For the current WHO strategy for leprosy control (based on early case finding, adequate treatment with multidrug therapy (MDT) and health education) to be effective, a significant coverage of the endemic population is required.

In order to identify the optimal methods for integrating vertical leprosy control programmes into the PHC system in different situations, it is necessary to have a full understanding of the constraints involved, and to identify the most important problems and their solutions.

The objectives of the consultation were as follows:-

1. General objectives

- 1.1 To review country experiences with leprosy control as an integrated part of the PHC system;
- 1.2 To discuss and develop approaches for integrating leprosy control into the PHC system under different situations;
- 1.3 To identify areas for health systems research regarding integration of leprosy control into the PHC system;

2. Specific objectives

- 2.1 To review constraints impeding integration of leprosy control into the PHC system and suggest practical solutions;
- 2.2 To identify mechanisms for promoting community participation in leprosy control;
- 2.3 To identify the role of general public health managers (particularly at the intermediate level) in an integrated leprosy control programme;
- 2.4 To identify the role of specialized leprosy control staff in an integrated leprosy control programme.

THE PRIMARY HEALTH CARE SYSTEM

The meeting defined the 'PHC system' as the integrated health system based on the PHC approach, and decided to address itself mainly to the problems of integrating leprosy control into the district health system based on PHC. This system includes the first referral level (e.g. District Hospital).

The PHC approach is considered as an overall approach of the entire health system directing itself to the following main principles:

- equitable use of health resources;
- community participation;
- intersectoral cooperation.

In most countries the district level is considered the most appropriate level for the organization of an effective PHC infrastructure but it has been reported that the administration (including the district health services management) of the districts is generally very weak.

MAIN LIMITATIONS REGARDING THE IMPLEMENTATION OF LEPROSY CONTROL THROUGH A VERTICAL PROGRAMME

The meeting identified the following items as the main and most frequently occurring limitations regarding the implementation of leprosy control through a vertical programme:

- Insufficient coverage of the population by vertical programmes.
- Inefficiency with regard to the use of resources (finances, equipment, manpower).
- A disproportionately high amount of resources for vertical leprosy control programmes is often used for institutional care of patients.
- Relatively too much attention is given to methods of active case finding.
- Lack of comprehensive health care.
- Staff of vertical leprosy control programmes often have sporadic contact with the community due to the fact that clinics are conducted periodically (no continuity of services).
- A vertical approach, separating the leprosy services from the general health services, increases the stigma related to leprosy among the community and the general staff.
- Managerial weakness of some vertical programmes.
- Vertical programmes are often more dependent on donor agencies than integrated programmes. (Integration reduces the danger of a collapse of the programme if donor agencies withdraw their assistance).
- Lack of job satisfaction for specialized leprosy field workers.
- Lack of career opportunities for peripheral specialized leprosy workers.

Practically all of the limitations listed above justify the integration of leprosy control into the PHC system.

INTEGRATION OF THE LEPROSY CONTROL PROGRAMME INTO THE PHC SYSTEM

In practically all countries where leprosy is endemic, leprosy control activities were started as vertical programmes but now they are gradually being integrated into the general health services. Although many countries report that leprosy control has been integrated, it appears that, depending on the situational diversity of the various countries, many of the vertical characteristics have remained in the process of integration. This is especially the case with technical supervision, drug supply and the provision of transport. A wide variety of (transitional) mixtures exist between vertical leprosy control programmes and fully integrated (administratively and operationally) programmes.

Review of the main constraints regarding the integration of leprosy control into the PHC system

The various constraints regarding the integration of leprosy control into the PHC system, as identified during the consultation have been grouped according to issues appearing in the Report on the Consultation on Operational Issues in the Transition from Vertical Programmes Toward Integrated Primary Health Care, New Delhi, 4-12 June 1984, WHO (SHS/85.5). (See section 6.2).

The identification of practical solutions to these constraints is an important pre-requisite for the formulation of recommendations for the optimal strategy to integration of leprosy control into the PHC system. For this reason the selection of the

most relevant constraints of integration and the identification of practical and adequate solutions is imperative whenever integration of leprosy control into the PHC system is considered. The meeting appreciated that it is impossible to identify a universally acceptable blueprint of solutions due to the different situations in various countries (see section 7.3).

KEY ISSUES

The meeting formed three groups to discuss the following key issues:

1. Community participation and intersectoral cooperation.
2. Identification of tasks related to leprosy control for the different levels of the primary health care system.
3. Essential steps in the process of transition of vertical leprosy control programmes into the primary health care system.

All groups had to identify areas for health systems research according to its respective subjects.

Community Participation and Intersectoral Cooperation

In order to improve the effectiveness and efficiency of integrated leprosy control programmes, it is necessary to identify optimal methods for promoting community participation in leprosy control, including methods for approaching the community.

The objective of the requested participation is for the community to assist (a) in the identification of suspect patients, (b) in motivating patients to receive regular treatment, (c) in socially accepting and supporting leprosy patients, and (d) in caring for the disabled. Effective participation by a community in decision making can only be expected when the community is well informed. Such information should contain basic knowledge about leprosy, its physical and social consequences, as well as its treatment.

As leprosy should be seen in the context of the whole health problem, activities to establish community participation should always be undertaken as an integral part of general health activities (see section 7.1).

Intersectoral cooperation is most effective at the community level. However, efficient cooperation can only be achieved when the total health sector - government and non-governmental organizations (NGOs) - work together with other sectors for the benefit of the patient.

The type of assistance other sectors can give might be, e.g. in ensuring and facilitating equal employment opportunities, rehabilitation of patients, agricultural support and support by teachers and religious leaders.

Identification of tasks related to leprosy control for the different levels of the primary health care system

Recognizing that health-related activities should preferably be undertaken by adequately trained workers at the most peripheral level of health services, the participants agreed upon tasks related to leprosy control for respective levels of the primary health care system as shown in Table 2.

The presentation has been limited to a broad outline of tasks which, although not a blueprint for every country, is nevertheless adaptable to the diversity of situations of different countries. Each country will have to define the most appropriate level for the tasks identified.

General public health managers, especially at the intermediate level, are often not adequately trained for management functions, including administrative and technical aspects.

An important condition for successful integration of leprosy control into the PHC system is that the role (tasks and responsibilities) of specialized leprosy control staff in the integrated programme should be well defined beforehand.

Leprosy control staff who have basic qualifications for general health functions should be assimilated in the PHC system. However, staff trained in leprosy only, should receive further training if they are to have additional general functions unless they become specialized leprosy staff of the technical support system.

Essential steps in the process of transition of vertical leprosy control programmes in the PHC system

An ill-planned process of integration may easily lead to failure and to a poorer performance of the leprosy programme. This may happen if integration is introduced without scrutiny for possible constraints. A successful transition requires identification of solutions to these constraints. The list of possible constraints to integration could be used as a checklist (section 6.2).

The planning and implementation of the process of integration should be a combined effort of the general public health managers and the managers/specialists of the leprosy control programme and should include the following stems:

1. Commitment

A pre-requisite for the integration of leprosy into the primary health care system is a commitment to integration by the politicians, professionals, and the community. In order to achieve this, the principle of integration must also be actively advocated by WHO, Non-governmental organizations (NGOs) and other agencies.

2. Situation Analysis

A. Infrastructure: A situation analysis regarding the infrastructure should include the PHC system, the existing leprosy control programme, other existing vertical programmes, existing voluntary agency programmes and their existing relationships and should take into consideration:

- Organizational structure, including managerial and technical capability
- Manpower including Community Health Workers (CHWs)
- Facilities including referral centres and laboratories
- Communication, supplies and equipment including drugs and transport
- Reporting systems
- Financial resources: governmental, non-governmental and those from recipients, e.g. through health insurance
- State of affairs regarding community participation and intersectoral cooperation.

B. Leprosy Problem: Considerations regarding the leprosy problem should include:

- Prevalence rates of leprosy
- Community perception of leprosy including staff and patients
- Current treatment of leprosy
- Operational performance of the vertical programme.

3. Selection of priorities

Based on the situational analysis, the problems to be solved for implementation of optimal integration of leprosy control into the PHC system should be identified. Given the primary objective that all leprosy patients should receive regular treatment with MDT, the activities to be undertaken to solve these problems should be ranked in order of priority.

4. Development of plan of action

The plan of action should include all activities as identified under No. 3 above. Among issues to be considered are the following:

- Decisions should be made concerning technical support and the relationship between technical and administrative support for each level of the PHC system, especially regarding technical supervision, referral, training, monitoring and evaluation.
- Special attention should be given to a clear definition of tasks, responsibilities and relationship between technical and administrative staff. This requires the formulation of adequate job descriptions for health staff at each level of the PHC system. Attention should be paid to the role of special leprosy institutions if still existing.
- Decisions should be made on the number and type of personnel required at each level of the PHC system.
- The establishment of an adequate method for the monitoring and evaluation of the performance of all levels of staff within the integrated leprosy control programme, as outlined in the report of a WHO Study Group on Epidemiology in Relation to Control (TRS 716). Routinely collected data from peripheral workers should be limited to data that have direct bearing on decision making.
- Responsibility for logistics and procurement should be clearly defined.
- Appropriate training, based on needs identified in the situational analysis, should be arranged for:
 - . existing general health staff
 - . existing vertical leprosy staff
 - . mid-level managers
 - . existing schools for health personnel
- Community participation should be ensured.
- An adequate budget should be prepared.
- A phased introduction (phasing of place and time) should be considered but adequate targeting should prevent unnecessary delay in achieving total coverage of the country.

5. Implementation

Integration should be implemented in accordance with the plan of action.

6. Monitoring and evaluation of the process of integration

Monitoring of the process of integration and regular evaluation is of vital importance. Evaluation should be based on targets and may lead to re-adjustment of such targets. While doing this the impact of the process of integration on the leprosy control performance should be carefully monitored as well.

It was recognized at the meeting that identification of a universally applicable blueprint for all steps in the process of the transition is not feasible. However, it was felt that a creative and adequately trained programme manager, using the outline of steps as presented above, should be able to work out an effective plan of action appropriate for his specific situation.

CONCLUSIONS

Although the need for integration of vertical leprosy control programmes into the PHC system is widely recognized, the transition has been slow in many countries. In most countries where integration has been implemented, many vertical characteristics still remain, e.g., system of technical supervision, referral of patients, drug supply and financing.

Integration of leprosy control into the PHC system does not imply that all specialized elements should disappear from the health services. It does, however, mean that leprosy control activities will become the responsibility of decentralized, multipurpose and permanent health services which provide the community, including the leprosy patients, with integrated, comprehensive and continuous health care.

Leprosy control should be fully implemented by multipurpose workers of the PHC system within which a specialized leprosy component should be available for technical supervision, advice and referral. Depending on the local situation (e.g. prevalence of leprosy, training of the various levels of health staff etc), each country will decide at which level (national, regional, district) of the PHC system such specialized support should be available.

It is recognized that the integration of a vertical leprosy control programme into the PHC system requires careful and adequate planning in advance, and needs to be introduced step-by-step (phasing in place, time and activities). It should gradually expand to cover the whole country. Targets should be set realistically to prevent unnecessary delay.

Most vertical programmes have detailed reporting systems which the specialized staff appear to handle adequately. After integration, however, the reporting system should be modified and indeed simplified to allow for meaningful data collection by the peripheral health workers. Only data directly linked to decision-making needs to be collected.

Action-oriented health systems research, directed to decision-making is needed to:

- ascertain cost-effective and optimal strategies for case detection, treatment (including patient care for disability prevention) and follow-up of patients;
- identify the lowest peripheral level of the PHC system to which individual tasks should be effectively delegated;
- identify and validate methods for monitoring of task performance and evaluation of programme effectiveness. This research includes the validation of appropriate indicators and the definition of the minimum data requirements.

The incorporation of leprosy (control) into the curricula of medical faculties and paramedical schools is essential for the successful integration of leprosy control into the PHC system.

Systematic management training, geared to planning, monitoring and evaluation of integrated leprosy control programmes, is needed for intermediate-level health services managers.

The operational combination of vertical control programmes for leprosy and tuberculosis should not be confused with integration. Basically, such combined programmes are subject to the same limitations as are vertical control programmes for leprosy alone (see section 5).

1. INTRODUCTION

The consultation was held at WHO Headquarters in Geneva from 16-18 June. Participants from nine countries took part together with representatives from the Regional Office for South-East Asia, International Federation of Anti-Leprosy Associations and staff of WHO Secretariat. The participants were selected from countries where (1) leprosy has been integrated into the PHC system, (2) there is partial integration and (3) a vertical approach is still in use.

The meeting was opened by Dr F. Assaad, Director, Division of Communicable Diseases, WHO, Geneva. In his opening remarks Dr Assaad stated that, in his view, the consultation on implementation of leprosy control as an integrated part of the primary health care system was important. Vertical programmes for leprosy control ought to be a thing of the past rather than a fact to be confronted nowadays. He urged the participants in the consultation to identify subjects for health systems research for the purpose of finding the best ways to change from vertical to integrated programmes, while at the same time ensuring cost-effective leprosy control.

2. BACKGROUND

Integration of leprosy control and the care of leprosy patients into the PHC system is making difficult and slow progress in most endemic countries. This is often attributed to the stigma attached to the disease in the community and among health workers and partly to the reluctance of specialized personnel/institutions to delegate their responsibilities to other sectors in the health services, and to the reluctance of the peripheral health workers to accept leprosy control activities as an additional burden to their routine work.

Although it was initially expected that the introduction of the multidrug regimens (MDT) recommended by the "WHO Study Group on Chemotherapy of Leprosy for Control Programmes" (October, 1981) might face serious difficulties, the experiences reported from endemic countries where MDT is being implemented indicate the opposite. Apart from preventing the increasing appearance of M. leprae strains resistant to dapsone, obtaining an early reduction in infectivity and considerably reducing the period of treatment, participants in the "WHO Consultation on Implementation of Multidrug Therapy" (October 1985) also reported an increase in patients' treatment compliance, higher motivation of health workers and an increase in the number of self-reporting cases with early signs of the disease. However, the same group identified that, in those countries with vertical programmes, centralization of activities was too strict, and progress in the implementation of MDT was too slow and of low population coverage.

For the current WHO strategy for leprosy control to be effective (based on early case finding, adequate treatment with multidrug therapy (MDT) and health education) a significant coverage of the endemic population is required.

In view of the above, it was felt that the opportunity should be given to the WHO secretariat to hold this consultation with programme managers from various countries on the various aspects of implementation of leprosy control as an integral part of the PHC system in order to give the best possible advice to Member States in this respect. It was felt that in order to identify the optimal methods of integration of vertical leprosy control programmes into the PHC system in different situations, a full understanding of the constraints involved in the transition from vertical leprosy programmes to the PHC system and the identification of the most important problems and the solutions to these problems will be required.

With regard to recent developments focusing on the need for further attention at both national and international levels to finding better ways to organize and manage health work at the intermediate level ("district"), it was suggested that the meeting should address itself mainly to the process of transition of vertical leprosy control programmes into the PHC system at the intermediate and peripheral levels.

3. OBJECTIVES

The objectives of the meeting were as follows:

3.1 General objectives

- 3.1.1 To review country experiences with leprosy control as an integrated part of the PHC system;
- 3.1.2 To discuss and develop approaches for integrating leprosy control into the PHC system under different situations;
- 3.1.3 To identify areas for health systems research regarding integration of leprosy control into the PHC system;

3.2 Specific Objectives

- 3.2.1 To review constraints impeding integration of leprosy control into the PHC system and suggest practical solutions;
- 3.2.2 To identify mechanisms for promoting community participation in leprosy control;
- 3.2.3 To identify the role of the general public health managers (particularly at the intermediate level) in an integrated leprosy control programme;
- 3.2.4 To identify the role of the former specialized leprosy control staff in the integrated leprosy control programme.

4. THE PRIMARY HEALTH CARE (PHC) SYSTEM

4.1 Interpretations of primary health care

It appears that in all countries the "PHC system" has been conceived as an integrated health system which does not stop at the peripheral health unit of the formal health services, but extends into the community which is not just a passive recipient of health care but an active participant in the provision of its own health care.

First level referral units are generally considered as an integrated part of the PHC system. In Indonesia the health centre (staffed by a medical officer) is considered as the first referral level, and the second and third referral levels are also included in the PHC system.

In Ethiopia all levels, including the central level are considered as integral parts of the PHC system.

The Sudan was among the first countries to adopt the primary health care approach and to work out a detailed primary health care document. However, as there was limited involvement of the primary health workers (PHWs), there was much misinterpretation of PHC and PHWs. In spite of all its shortcomings, primary health care has improved coverage to a degree that could not have been possible otherwise.

The PHC approach is considered as an overall approach of the entire health system directing itself to the following main principles:

- equitable use of health resources (especially with regard to its coverage and effectiveness), recognizing the basic right to health for each individual.
- community participation, recognizing the right and responsibility of individuals and communities for their own health development.

- intersectoral co-operation, recognizing that health development and socio-economic development are inseparably linked, i.e. progress in health leading to, and at the same time depending on, socio-economic progress.

The requirements implicit in the concept of PHC have been formulated in the Report on the Consultation on Operational Issues in the Transition from Vertical Programmes Toward Integrated Primary Health Care, New Delhi, 4-12 June, and are as follows:

- that there be total coverage of the population, taking into account the differential needs of the sub-groups;
- that services are effective, accessible, acceptable, and affordable;
- that services are comprehensive, including promotive, preventive, curative and rehabilitative approaches to health;
- that communities participate actively in the planning, implementation and evaluation of health services; and
- that health services are related to other sectors involved in development.

The meeting defined the "PHC system" as the integrated health system based on the PHC approach, and decided to address itself mainly to the problems of integrating leprosy control into the district health system based on PHC. This system includes the first referral level (e.g. District Hospital).

4.1.1 Equitable use of health resources

In Indonesia, equitable use of health resources has been given high priority for over 17 years. Each health centre is assisted by 2 to 5 sub-centres which cover the areas that are beyond the immediate catchment area of the health centre. Additionally, mobile "health centres" cover the remaining areas (the latter is also the case in Malaysia). Integrated health posts are now being established in some villages (as a pilot project assisted by WHO) staffed by village kader (CHW's) and supervised by health centre staff. The communicable diseases control will be one of the activities.

In Thailand, although much work has already been done on the implementation of PHC, disadvantaged communities have not yet been sufficiently covered.

In Ethiopia, the coverage of the population by the health services has been increased from 10% to 49% since the government committed itself to PHC.

In Tanzania, the coverage has also been considerably increased since the introduction of PHC.

4.1.2 Community participation

The importance of community participation is recognized in all countries. Community participation depends a great deal on the existence of mass organizations, e.g. in Ethiopia many such organizations are involved in the selection of CHW's and Traditional Birth Attendants (TBAs). These organizations have responsibility for supporting their training, planning, priority setting and evaluation. *

In Indonesia, communities are actively involved in PHC through close interaction with health centres, village kaders (CHW's), and involvement of village councils, and self-help activities.

In Thailand, the "bottom-up" planning starts at the sub-district level. Community groups and village communities do not yet sufficiently take an active part in the over-all decision-making. The meeting considered the identification and implementation of optimal methods for promoting community participation in leprosy control as an important pre-requisite for an effective and efficient integrated leprosy control programme.

4.1.3 Intersectoral cooperation

In most countries there is a lot of movement towards promotion of intersectoral cooperation but practical implementation appears to be very difficult. The process is very slow or it has not been initiated at all.

In Vietnam, however, intersectoral collaboration is one of the main characteristics of the health care systems. Health activities are under the direct responsibility of the People's Administrative Committee at the various levels, including the village level. The different socio-economic branches, including the health services, are represented in this Committee.

In some countries, national (and sometimes regional, as in Indonesia) coordination boards for leprosy do exist. Other departments involved are social welfare, education and religion, as well as Non-Governmental Organizations (NGOs) involved in leprosy control. Although this is an example of intersectoral coordination, its limitation is clear. It is strictly limited to leprosy.

In 1982 in Malawi, it was found by an evaluation of the pilot PHC project that intersectoral cooperation quickly evaporated and the Ministry of Health was left to engage in PHC alone.

In Ethiopia, health education, nutrition and water supply are essentially the intersectoral activities which are being undertaken. Since there is no detailed guidance on intersectoral collaboration, there is a need to specify the contributions which should be made by different agencies and ministries. It might be concluded that intersectoral cooperation is still in the initial phase.

4.2 The District Level

The meeting used the term "district" to refer to that level of a nation's health and administrative system which has some degree of administrative authority; which usually has representatives of the main government sectors; which often includes several villages or communities; and which provides the main coordination and support for the local health services within its jurisdiction. It may also be referred to as "district", "block", "Thana", "area", etc., and will vary greatly from country to country in its size, sophistication and degree of autonomy. However, it is usually the most peripheral fully organized level of local government and administration. It is therefore often the most appropriate level to concentrate on in order to strengthen health programmes and their management because of its role as a linkage point between local communities, their specific needs and concerns on the one hand, and the national goals, policies and resources on the other.

The main characteristics of the districts as identified by the countries participating in this consultation are presented in Table 1.

TABLE 1. MAIN CHARACTERISTICS OF DISTRICTS

COUNTRY	No. of districts in the country	Average area sq. kms.	Average population	Population density per sq. km	Name of Health facility + No. per district	Average No. of beds per health facility	Type of Para medical personnel + No. per facility
State of Amazonas (Brazil)	Rural Districts 9	111,000	56 000	1.6	3-7 Hospitals per district	20	1-4 physicians
Ethiopia	107	11 700	392 705	33.6	Medium rural hospital (in 30% of the districts) Health centre 1.3 per dist.	75	3-5 general 3-5 nurses
Malawi	24	4 000	300 000	73	Govt. Dist. Hosp. 1	75	1 physician
Malaysia	90	5 000	160 000	46	District Hosp. 1 Rural Health Unit	100	2-15 physicians
Sudan	Rural District ± 55		± 100 000		Rural District Hosp. (1)	60	1-2 physicians
Tanzania	104	9 000	200 000	24	Rural District Hosp. (0.8)	100	1-3 physicians
Thailand	723	710	70 789	99	Community Hospital (0.6)	20	1-4 physicians
Viet Nam	550	600	100 000	176	District Hosp. 1	75	± 5 specialists 10 physicians

In most countries the district level is considered the most appropriate level for the organization of an effective PHC infrastructure but it has been reported that the administration (including the district health services management) of the districts is generally very weak.

In Thailand, and in Malaysia (with the exception of a few districts), the curative and public health functions are separated at the district level (e.g. a District Public Health Office and a District Hospital). In other countries these functions are under a single head, usually a hospital based district medical officer.

In Indonesia the district medical officer is operating from the District Public Health Office. Often these doctors also have some clinical functions.

In Kenya, the District Medical Officer has a substantial amount of authority in all aspects of management. This decentralization of power includes full responsibility for all health staff and personnel in the district.

The general public health managers, especially at this level, are often not adequately trained for management functions. Furthermore, the tasks and responsibilities of these managers regarding the integrated leprosy control programme are often not clearly defined, especially when there is still some interference by the (former) vertical programme staff (e.g. technical supervision, drug supply etc.) (see section 7.2).

4.3 Vertical Programmes

Vertical programmes still exist in most countries; usually throughout the whole country; however, in some cases, certain programmes are still vertical in some parts of the country and integrated in other parts (i.e. leprosy control in Thailand has been integrated in 67 provinces and is still vertically organized in 6 provinces).

5. MAIN LIMITATIONS REGARDING THE IMPLEMENTATION OF LEPROSY CONTROL THROUGH A VERTICAL PROGRAMME

Many public health specialists blame the current unsatisfactory achievement in leprosy control on the limitations inherent to vertical programmes. Others, especially leprosy specialists and donor agencies, are afraid that integration will make things worse, especially now that the operation of a leprosy control programme has become more complex with the introduction of multi-drug therapy (MDT). Therefore, some specialists advise postponing integration, at least until MDT has been fully introduced.

The meeting identified the following items as the main and most frequently occurring limitations of leprosy control through a vertical programme:-

- Insufficient coverage of the population by the vertical programme, recognizing that leprosy service must be as close as possible to the population.
- Inefficiency with regard to the use of resources (finances, equipment, manpower). This is especially so when there are several vertical programmes co-existing which are more or less duplicates of each other. Because of this situation many other health problems are not sufficiently attended to.
- A disproportionately high amount of resources for vertical leprosy control programmes is often used for institutional care of patients. There is relatively too much attention on clinical and/or rehabilitation aspects and not enough on public health aspects, (e.g. improvement of the coverage of the health service; improvement of the quality of services with regard to effective case holding; inadequate system of supervision etc.)

- Relatively too much attention given to methods of active case finding such as mass surveys, and school surveys, etc. without safeguarding adequate and regular chemotherapy of the newly-detected patients.
- Where vertical programmes make predominant use of methods of active case finding, patients detected by these methods show a much higher irregularity rate and/or defaulter rate than self-reporting patients.
- Lack of comprehensive health care. Leprosy patients with (other) general complaints have to consult other health services. This in fact neglects the felt needs of these patients.
- Staff of vertical leprosy control programmes often have sporadic contact with the community due to the fact that clinics are conducted periodically (no continuity of services) and that they are not consulted by the people for other health problems. This does not lead to an optimal relationship with the community which may result in a delay in the (self) reporting of leprosy patients.
- Due to the relatively long period of chemotherapy required for the treatment of leprosy, there is a high risk of irregularity and/or defaulting when patients are treated by vertical programmes providing periodic services. But in integrated services providing continuous and comprehensive health care, which responds to the various health needs of the patients, the utilization of the services may be expected to be much more regular.
- Inherent lack of continuity of care for reactions, ulcers and other complications due to the fact that there are only periodic clinics for leprosy patients at fixed clinics or mobile units.
- A vertical approach, separating the leprosy services from the general health services, increases the stigma related to leprosy among the community and the general health staff. Health education cannot solve this problem as long as leprosy is treated separately by a special programme with special staff.
- Managerial weakness of some vertical programmes, (e.g. some of those conducted by charitable organizations have much dedication to the patient but often lack managerial professionalism.)
- Vertical programmes are often more dependent on donor agencies than integrated programmes. Integration reduces the danger of a collapse of the programme if donor agencies withdraw their assistance.
- Lack of job satisfaction for specialized leprosy field workers.
- Lack of career opportunities for peripheral specialized leprosy workers.

Practically all of the limitations listed above may provide some justification for the integration of leprosy control into the PHC system.

6. INTEGRATION OF THE LEPROSY CONTROL PROGRAMME INTO THE PHC SYSTEM

6.1 State of affairs

In practically all countries where leprosy is endemic, leprosy control activities were started as vertical programmes but now they are gradually being integrated into the general health services. Although many countries report that leprosy control has been integrated, it appears that, depending on the situational diversity of the various countries, many of the vertical characteristics have remained in the process of integration. This is especially the case with technical supervision, drug supply and the provision of transport. A wide variety of (transitional) mixtures therefore exists between fully intact vertical leprosy control programmes and fully integrated (administratively and operationally) programmes. Some relevant examples as presented by the participants are given below.

6.1.1 Organizational structure of the 'integrated' leprosy control programmes

In Thailand the leprosy control programme has been integrated in 67 provinces and is still vertically organized in 6 highly endemic provinces. In the integrated provinces leprosy control is closely guided and technically supervised by the vertical programme operating from zonal leprosy control centres, each covering several provinces. Drugs and educational materials, including the leprosy control manual, are supplied by the Central Leprosy Division. Salaries and other resources are the responsibility of the provincial government. In the provinces with a vertical programme, all leprosy control activities are carried out by special leprosy workers who are, technically and administratively, answerable to the Chiefs of the Provincial Leprosy Control Programmes. These Chiefs, one in each Province, are technically and administratively answerable to the directors of the Zonal Leprosy Control Centres.

The national leprosy control programme in Malaysia started in Peninsular Malaysia in 1969 and extended to Sarawak in 1974 and Sabah in 1985. The decentralization of treatment and integration into the general health services has been a main feature from the very beginning. As the general staff could not be trained immediately (time constraint and lack of other resources), as an interim measure 23 mobile skin clinics were established in the Malay Peninsular in order to reinforce control activities during the transition period.

The control programme is under the full responsibility of the State and District authorities. The National Leprosy Control Centre at Sungai Buluh is responsible to the MOH for the planning, coordination and technical guidance of the integrated programme. A leprosy managerial team, based at the headquarters, travels around the country for supervision, guidance and training at local level.

At the present moment of transition, the leprosy control programme may be considered as a semi-integrated one:

- peripheral facilities are utilized and peripheral general staff involved,
- a leprosy nurse is available for local assistance,
- a leprosy managerial team provides supervision.

In Sabah and Sarawak, the programme has been fully integrated without any vertical staff involved. It has been observed that the programme in these areas is better run than in the semi-integrated areas.

In Malawi, the leprosy control programme is still highly vertical in most parts of the country. It is almost fully financed by a donor agency which is de facto directly responsible for the programme. At present, leprosy control work is gradually handed to the MOH in those districts where the prevalence and the case detection rates are low. In these districts leprosy control activities are being integrated at the health centre level. Special leprosy supervisors are maintained at the district level for technical supervision. Salaries for the staff in these districts are paid by the MOH. The donor agency still finances running costs and provides transport and drugs.

In the State of Amazonas, Brazil, leprosy control was limited to a leprosarium, an outpatient clinic in the hospital and some activities at six health centres at the district level in the interior. In 1979 a start with a systematic approach to leprosy control was made when the state health secretary ordered that leprosy control should be integrated into PHC. There was, however, considerable reluctance amongst health centre staff to deal with leprosy and specially assigned paramedical workers had to deal with mainly leprosy control activities. Since the introduction of MDT the tendency is that leprosy work will be more acceptable to health centre staff, and it is expected, that by the end of this year all patients in the rural districts will be under treatment at the health centres. At present a wide range of several mixtures ranging from vertical to integrated programmes exist. This situation is, to a great extent, attributable to the fact that in the state of Amazonas, Brazil leprosy control is conducted under the authority of different organizations.

In Burma, the vertical programme is in the process of transition to integration. This is happening in a phased manner. In some areas all leprosy control activities have been delegated to the general health services. Peripheral multipurpose workers supervise the CHW's. The vertical staff is, however, still very much involved in technical supervision, training and drug supply, and they still have to confirm the diagnosis.

From the very beginning of leprosy control, Indonesia has had a fully integrated leprosy control programme from the central level down to the sub-district (health centre) level. However, this integration is mainly administrative. The technical supervisory system has still many vertical characteristics. At the national (Leprosy Division of the Directorate General CDC), provincial (leprosy doctor of the provincial CDC department) and district levels (leprosy supervisors of the district CDC department), specialized supervisory staff are available for technical guidance and supervision. At the sub-district level (health centre) in high leprosy endemic areas, one of the 'multi-purpose' workers of the health centre is dealing with leprosy control activities and has thus become a uni-purpose leprosy field worker. It is now a policy to replace retiring uni-purpose field workers by multi-purpose workers.

In Ethiopia three systems of leprosy services exist:

- fully integrated, in areas with a low prevalence (less than 1%)
- partially integrated, in areas with a moderate prevalence (1-4%).
- fully vertical, in Showa Province where the All Africa Leprosy and Rehabilitation Training Centre (ALERT) conducts the leprosy control programme.

In the fully integrated leprosy service, all activities are carried out by the general health services under the responsibility of the Regional Medical Officer. Technical guidance and coordination is still provided by the National Leprosy Control Programme.

In the partially integrated service, leprosy control is still mainly a vertical programme but clinics are conducted in general health centres and health stations. Formerly these clinics were conducted by special leprosy field workers. These workers have recently been trained as multi-purpose health workers (health assistants). They often provide comprehensive health care but they are still mainly concerned with leprosy control activities. These leprosy health assistants are under the direct supervision of the Regional Leprosy Medical Officer and the Regional Leprosy Supervisor.

At the community level, community health workers are supervised by the re-trained leprosy health assistants who may delegate this task to multi-purpose health station assistants.

The salaries of the staff are paid by the General Health Services but other resources (i.e. drugs, transport, per diems, etc.) are supplied directly by the National Leprosy Control Programme through the Regional Leprosy Supervisor.

The latter is also the case in Tanzania. The Regional Leprosy and T.B. Coordinator (a medical officer) administratively is under the Regional Medical Office. He receives technical supervision and guidance from the Central Leprosy and T.B. Unit. Despite this administrative integration, the funds, drugs and transport are directly provided to the Regional Leprosy and T.B. Coordinator by the Central Unit. So, although there is administrative integration, the line of supply and the system of technical supervision is still vertical.

In Vietnam leprosy control is integrated according to the concept of 'double integration', i.e.:

- integration into the National Institute of Dermatology in which leprosy control constitutes the central task of all dermatologists at all levels.
- integration into the general health services from the district level down to the village level.

6.1.2 Distribution of tasks

The adequate reorientation of existing (multi-purpose and uni-purpose) health personnel at all levels for their new roles in the PHC system is an important requirement. A clear outline of responsibilities and tasks is necessary as well as special (re)training programmes to enable the staff to take up their new responsibilities.

Taking into account that health-related activities should preferably be undertaken at the most peripheral practicable level of health services by adequately trained workers, the meeting dwelt at length on an outline of tasks acceptable to the participants, (see section 7.2). Such an outline, however, has to be adapted to the diverse situations of the different countries, (e.g. the level of training of the various levels of staff).

A few examples of the existing situation in the various countries are presented below.

6.1.2.1 Community level

In general there exists a common opinion regarding the tasks for this level which, when identified, consist mainly of assisting the first health facility level with:

- referral of suspect cases;
- provision of health education (in order to promote awareness and early self reporting and drug intake compliance);
- tracing of absentees;
- treatment delivery which may, in special cases, be delegated to this level;
- follow-up of cases;
- simple data collection.

6.1.2.2 First health facility level

This facility varies from country to country in regard to quantity and quality of staff, equipment etc. and, for this reason, the tasks have to be adapted to the local situations.

In Ethiopia, the health station, staffed by 1-3 health assistants, is the first health facility level and one of the tasks is to diagnose leprosy. However, the health station staff are not allowed to start treatment without prior confirmation of the diagnosis by the District Leprosy Supervisor. This confirmation takes place at the health station.

In the districts with integrated leprosy control in Malawi, the general paramedicals of health centres detect patients and conduct leprosy clinics. This is done under close technical supervision of the District Leprosy Supervisor who in fact is directly responsible for leprosy control activities in his district.

In Thailand, the health centre is the first health facility level which is generally staffed by a sanitarian and a midwife. Suspected patients are often referred to the first referral level (district hospital) for confirmation of the diagnosis, including the taking and examination of skin smears, before treatment can be started at the health centres. For the time being it is considered unfeasible to delegate the diagnostic responsibility to the health centre level as very often even district hospital staff need assistance from the technical supervisors from the Zonal Leprosy Control Centres.

Supervision of CHW's regarding their leprosy control tasks is generally considered a task of the staff of the first health facility level. In Ethiopia this is usually done by leprosy health assistants.

6.1.2.3 First referral level

This level (mostly a district hospital but in Ethiopia and in Brazil this is often a health centre as 60% of the districts do not yet have a hospital) is generally considered as the appropriate level for the management of severe reactions and secondary complications. This is also considered as the facility where leprosy patients should be admitted when necessary.

In Ethiopia and in the state of Amazonas, Brazil these cases are referred by the health centre to a higher referral level (often a nearby district hospital or regional hospital) where the patients are treated by the regional leprosy medical officer.

In Malawi, the District Leprosy Supervisor is based at the District Hospital. Patients with complications are referred by health centre staff to this or higher level or a special leprosy hospital.

In many countries admission to district hospitals is not possible for leprosy patients especially patients with disabilities. This is mainly attributed to the general hospital staff's lack of knowledge regarding complications of leprosy and to the stigma attached to the disease. In these situations patients with complications are often referred to special institutions such as leprosy hospitals, leprosaria and/or special clinics run by voluntary agencies.

6.1.3 Remaining responsibilities of (former) specialized leprosy control staff

Although in the integrated programme the responsibility is carried by the general health service manager, specialized staff at certain levels will still be required for technical supervision, referral support, etc.

In Ethiopia, the leprosy field workers joining the integrated programme have been trained to become multipurpose workers, but many of them have a special responsibility for leprosy control at the health station and health centre levels. The district leprosy supervisors, the regional leprosy medical officers and the regional leprosy supervisors are still full-time leprosy workers in the integrated programme but they now have only technical supervisory responsibilities. At the central level, the specialist staff of the National Leprosy Control Programme are responsible for policy formulation, planning and technical guidance of the integrated programme, organization of all types of training in leprosy, processing and analysis of data, and evaluation.

In Thailand, the 12 Leprosy Zonal Centres and 20 provincial leprosy units are still maintained, administered by the Central Leprosy Division (Department of CDC) in order to provide technical supervision, drug supplies and data processing.

It is considered an important condition to successful integration of leprosy control into the PHC system that the role (tasks and responsibilities) of the (former) specialized leprosy control staff in the integrated programme be well planned beforehand.

6.1.4 Special training programmes for the implementation of integration

In Ethiopia 150 special leprosy workers were trained (9 months) at health assistant schools to become multipurpose health workers. Of these, 147 graduated as health assistants and are working as multipurpose workers, but with special emphasis on leprosy, in health posts and health centres.

A curriculum in leprosy control has been introduced in all health assistant schools. Tutors of these schools and nursing schools are trained in leprosy and leprosy control for one month at ALERT.

Since 1978 all final year students of the medical faculty receive one month training at ALERT.

All (general) health assistants and nurses have to attend a 10-day course in leprosy conducted by the National Leprosy Control Programme in cooperation with the training unit of ALERT.

CHWs and Traditional Birth Attendants (TBA's) receive some specific training in leprosy by staff of the National Leprosy Control Programme at the health centre.

In Thailand 8 634 provincial general health workers (216 groups) underwent training prior to integration. Manuals and job descriptions were distributed.

In 1980 and 1981 additional refresher courses (3 days) were organized for 2 895 general health workers of 23 provinces. Recently such training activities have also been started at the district levels. Training courses in leprosy control directed to district medical officers and other district health staff are now going on.

In 1982, 32 district medical officers from district hospitals in the North Eastern Region have been trained (5 days). In 1983, 10 district medical officers and also Chiefs of CDC sections of the Provincial Health Offices were all trained in the framework of integration in the PHC system. In 1984, follow-up workshops (3 days) addressed to district medical officers and public health technical officers from 10 model districts were organized.

In Malaysia, the first step is the training of assistant nurses who were in charge of the mobile clinics. Following this, all categories of staff concerned with the different leprosy control activities are trained. The courses, of maximally one week's duration, are conducted by senior officers.

In Tanzania, prior to integration of the tuberculosis and leprosy programme into the general health care system, a series of training activities were conducted.

- Crash courses of 4 weeks duration for multipurpose medical assistants and rural medical aids were conducted prior to their appointment as district coordinators. A total of 95 people were trained in 1977.
- Four Zonal seminars for medical officers, senior nursing and laboratory staff selected from all hospitals were conducted in 1977.

District seminars. Three day seminars were conducted for groups of 25-30 participants from dispensaries, health centres and hospitals in each district. The number of seminars per district depended on the number of health units in the district.

- Courses for qualified general laboratory staff were organized. These were conducted for one week on direct sputum microscopy and slit skin techniques. The first phase covered staff from hospitals followed by staff from health centres and selected dispensaries on sputum microscopy. Skin smear microscopy has not been extended to the health centres and dispensaries as this is considered more difficult than sputum microscopy.
- Refresher courses were organized in the districts for general health and laboratory staff who had gone through the initial training programmes. Emphasis was on the districts with poor performance, e.g. low case-finding, poor case-holding, poor results of chemotherapy in tuberculosis.

6.2 Review of the main constraints regarding the integration of leprosy control into the PHC system

There are substantial operational difficulties in the transition from vertical programmes into the PHC system. The Report on the Consultation on Operational Issues in the Transition from Vertical Programmes Toward Integrated Primary Health Care, New Delhi, 4-12 June 1984, WHO (SHS/85.5) identified a number of issues to be dealt with initially if the transition is to be effective.

The various constraints regarding the integration of leprosy control into the PHC system as brought forward during the consultation have been grouped according to these issues. The division into these groups is, however, arbitrary and in some cases artificial as many constraints are strongly interrelated and therefore might be mentioned under more than one group.

The identification of practical solutions to these constraints is an important pre-requisite for the formulation of strategies for integration of leprosy control into the PHC system. For this reason the selection of the most relevant constraints of integration and their adequate and practical solutions is of utmost importance whenever integration of leprosy control into the PHC system is considered. The meeting appreciated that it is impossible to identify a universally acceptable blueprint of these solutions due to the different situations in various countries, (see also section 7.3).

6.2.1 Organizational aspects of the transition from vertical leprosy control programmes into the PHC system

6.2.1.1 Variations regarding the concepts of integration and PHC

There are different concepts of integration and of PHC in different countries and even within some countries at the different administrative levels (e.g. selective vs comprehensive PHC; complete disappearance of the specialized input vs the selection of specialized support of the integrated PHC programme etc).

6.2.1.2 Political support for integration into the PHC system

At the various administrative levels the necessary political commitment to PHC is often lacking. This results in weak administrative support for the programme and leads to discouragement amongst health staff and an organizational weakness of the PHC system.

The demand of some specialists, politicians and administrative authorities that up-to-date specialized prestigious medical centres and equipment should be provided in the country, (e.g. special leprosy rehabilitation centres). This leads to less support for the PHC system.

Politicians and administrative authorities may be influenced by the negative attitude of the specialists who do not accept that multipurpose health workers can deal with the problem of leprosy.

6.2.1.3 Priority setting of different programmes within the PHC system

Within the general health services, leprosy, as a low prevalent disease, often does not have a high priority; not even when compared with other communicable diseases. After integration, financial resources for leprosy control have been decreased leading to a shortage of drugs, transport, laboratory equipment and a decrease in training opportunities and, finally, to a worsening of the operational performance as compared with the state of affairs during the life of previous vertical programmes.

Too low a prevalence of leprosy in some areas does not justify special training for CHWs and/or multipurpose peripheral health unit staff.

Policies and plans of the central authorities change so fast that those responsible for implementation (e.g. for training) cannot adapt appropriately.

6.2.1.4 The PHC infrastructure

An inadequate infrastructure of the PHC system as compared with the infrastructure of the (previous) vertical leprosy control programme, especially regarding:

- . insufficient coverage of the population by the PHC system as compared to the coverage by the leprosy control programme (e.g. if leprosy control programmes use mobile units; unequitable distribution of health care facilities (urban and rural)). However, this usually is just the other way around.
- . inadequate functioning of the various referral levels (e.g. district hospitals which are an integral part of the PHC system) regarding the treatment of leprosy patients with reactions and secondary complications. This reduces the confidence of the patients in the PHC system.
- . inadequate laboratory services (quality and quantity of staff, equipment, supplies, coverage) of the PHC system.
- . insufficient support for the VHWS from the peripheral workers of the formal health services.

Weak managerial capacity of the "PHC system". The managerial capacity of the PHC system is often weak, especially at the district and peripheral levels, when compared to the the management and organization of the vertical leprosy control programme. This may be due to:

- . the fact that managers of general health services are often overburdened with administrative and/or clinical tasks. Moreover, they are often not adequately trained for management functions.
- . lack of interest and motivation towards public health among intermediate health service managers.

The poor collaboration between the District Health Office and the District Hospital in those countries where curative services and preventive services are separated at this level.

Absence of regionalization, (e.g. decentralization of tasks and responsibility to the district level).

Lack of manpower at the district level and more peripheral levels.

6.2.1.5 Role of donor agencies

Preference of some donor agencies to support vertical programmes with autonomous infrastructures (with regard to the monitoring of the spending of the funds and/or due to disbelief in the PHC approach). This is especially important in countries where leprosy control funds are mainly provided by donor agencies.

The continuation of voluntary agencies to conduct specialized programmes besides the integrated national leprosy control programmes. Sometimes this leads to a certain degree of competition which is confusing to the patient, community and health staff.

6.2.2 Community roles and perspectives related to integration, including the acceptability of the patient

Lack of necessary knowledge, skills and attitude of health staff for an adequate approach to the community (e.g. communication skills).

Inadequate linkage between the community village health workers and the formal health services system

Less attention for curative health service at the village level including care for leprosy patients. This does not cope with the demands of the community, which often does not consider the provision of health care as the first priority.

Leprosy patients find the performance of the multipurpose staff inadequate as compared with the performance of staff of the previous special programmes and/or those of existing VA programmes.

Leprosy patients, because of the stigma attached to the disease, do not accept the role of the CHW who is a member of their own community.

The existing belief amongst health workers, patients, politicians, administrators and the community that leprosy is a special disease which should be treated by a special service (stigma).

- . Unacceptability of leprosy patients, especially those with disabilities, by the general staff due to the stigma of the disease. The role of the social stigma varies from country to country. In Malawi and Tanzania it does not play a role as in other countries (e.g. Brazil, Burma, Indonesia) where social stigma still constitutes a major problem.
- . The fact that the staff assumes that because there is high stigma in the community the other integrated programmes will be less acceptable and thus less supported (financially, manpower) by the community after the integration of leprosy.

6.2.3 Orienting manpower toward integrated approaches to PHC.

Constraints regarding orienting health staff toward an integrated approach to the leprosy problem include:

Lack of interest in leprosy by general staff who are more interested in (acute) diseases in which results of treatment become quickly visible.

The continuing tendency of the integrated multipurpose peripheral staff to refer leprosy patients to special centres (e.g. leprosaria, voluntary agency leprosy clinics).

Inadequate training (and reorientation) of the previous specialized leprosy workers to carry out general health tasks.

Lack of expertise of general staff, e.g. regarding diagnosis of early reactions, drug resistance; prevention of disabilities, provision of health education, etc.

Inadequate training of the existing multipurpose workers and CHWs to carry out leprosy control tasks leading to a loss of quality, e.g.,

- . too much stress on clinical knowledge;
- . not oriented to the actual tasks of each level of staff;
- . too little stress on practical skills and attitudes;
- . not oriented to the actual local working situation of each level of staff (e.g. hospital based training for CHW's);
- . lack of teaching materials
- . inappropriate teaching materials; e.g. too much written material for VHW's

Lack of an adequate manual of instruction on leprosy control for all levels of health staff concerned.

Deficiencies in the contribution of universities to the adequate training of medical doctors in the fields of leprosy control, programme management and health systems research.

Deficiencies in the contribution from schools for paramedical workers to the adequate training of paramedical workers in the field of leprosy control.

Inadequate management of the supervisory system with regard to the integrated leprosy control programme at the various levels of the PHC system (when compared with the previous vertical programme). This may be due to:

- . the low priority of leprosy among the general health service managers (e.g. many peripheral multipurpose workers and especially CHWs see only a few or even no leprosy patients).
- . inadequately organized transport for supervisory activities.

Inadequate distribution of tasks (e.g. only special staff are allowed to supervise; mixing up administrative control and technical supervision).

Lack of (specialized) staff with adequate knowledge of leprosy control and/or supervisory techniques at the various levels of the PHC system.

The rule in some countries that leprosy has to be diagnosed by senior medical workers or even by medical doctors before treatment may be started.

Loss of quality of leprosy care/control due to the fact that multipurpose workers see too few (new) leprosy patients to keep up routine and skills.

6.2.4 Intersectoral cooperation.

Problems in the field of intersectoral cooperation due to conflicting objectives and/or different ranking of priorities of the sectors involved (e.g. regarding physical or social rehabilitation of patients).

In many countries there is still little experience with intersectoral coordination. Very often it is still in the planning phase and has not yet been implemented in practice.

Extent of communication and understanding among those concerned is limited especially at the peripheral level where intersectoral action must be aimed.

6.2.5 Managerial issues regarding the integration of leprosy control into the PHC system.

Some of the most difficult issues to be resolved during the transition from vertical programmes into the PHC system are the administrative and managerial aspects of integration. The most relevant of these aspects for the integration of leprosy control are mentioned in this section.

6.2.5.1 Distribution of authority and responsibility.

Unclear line of authority, distinction of responsibilities and tasks between the previous (senior) special staff and the regular administrative authorities of the general health services, e.g. regarding line of command, reporting and supervision.

The fact that technical supervisory staff do not have administrative authority may create problems in the sense that failures which require disciplinary action can only be reported to the administrative authorities.

Continuation of the retrained previous special leprosy workers to execute the leprosy control activities in the peripheral health units. This may prevent the other multipurpose health workers to accept leprosy control as an integrated part of their work.

Overburdening of the general peripheral health staff with too many tasks leading to an inadequate performance regarding leprosy control.

The assignment of too many and too ambitious tasks to the CHWs.

Failure to incorporate administratively the (previous) vertical staff into the general services.

6.2.5.2 Personnel management matters

Socio-political factors relating to changing roles and power relationship, e.g. adjustment of salaries and/or incentives; different levels of seniority, and/or training experience etc.

The system of incentive pay often leading to the feeling that some health workers receive less salary. When this is linked with the aim of achieving higher targets for some of the programmes (e.g. leprosy) this will lead to neglect of some activities and duties and even to the reporting of inflated data.

Reluctance of general medical staff to do additional work without additional financial compensation. This may have been induced by the (previous) vertical leprosy control programme which often worked with incentives for routine work.

Less job satisfaction of the previous unipurpose staff (but this can also be the other way around as was observed in Ethiopia).

Vertical staff of all levels may fear losing their jobs or be unwilling to give up their present position (incentive, reluctance to change and to take up more general duties) which may lead to obstruction of the (transition to) integration.

High turnover rate of CHWs and of peripheral health workers as compared with staff of the previous vertical programme.

6.2.5.3 Financial factors

Decrease in the budget for leprosy control activities after integration.

Flow of funds is not integrated as it is still provided by a central special unit down to the periphery.

Sometimes general health services do not provide free treatment to leprosy patients as compared with vertical programmes.

6.2.5.4 Drugs, supplies, equipment

Shortage of antileprosy drugs, laboratory equipment and/or transport facilities after integration. This may be due to the setting of priorities (given the budgetary limitations) by the general health service managers.

Rifampicin, procured for leprosy patients, is more easily used for other purposes in integrated programmes than in a vertical programme.

6.2.6 Monitoring and evaluation of the integrated leprosy control programme.

Conflict between the interests of specialists in a wide range of data for monitoring and evaluation and the administrative management which wants to rationalize the information system.

System of recording and reporting not adequate in the integrated services for appropriate monitoring and evaluation of the performance of the leprosy control programme. It need not be demanded that the same comprehensive leprosy reporting is maintained in the integrated programme given the low prevalence and low priority of leprosy amongst the other diseases.

Lack of competent staff at the regional and district levels for the monitoring and evaluation of integrated leprosy control programmes.

Rapid changing of health technology and terminology sometimes confuse the information system (records/report).

6.3 Need for health systems research in the field of leprosy control as an integrated part of the PHC system.

In the report of a WHO Study Group on Epidemiology in Relation to Control, Technical Report Series (TRS) 716, Geneva 1985, the following proposals for operational research were suggested:

Critical attention needs to be paid to assessing the validity, and to improving the practicability of the many operational indicators proposed in this document. The list should be regarded as provisional, being formulated on the basis of currently available knowledge, and will need revision and improvement on the basis of experience with the field application of multidrug regimens.

Operational research into optimal methods for integrating leprosy control into the primary health care programme.

Research on the best use of resources in relation to effectiveness of leprosy control.

Research on methods for evaluating community participation in particular in case-detection and case-holding.

Most countries identified one or more of these proposals as a need. In Thailand, for example, the following needs have been identified:

- Health systems research emphasizing the development of an acceptable and efficient strategy in the integration of the leprosy control into the PHC system.
- Research on development of an essential information system which is based on data collected at the most peripheral level of the PHC system.
- Research on tasks in the field of leprosy control which can be delegated to community health workers.

7. KEY ISSUES

During the second and third days of the meeting, participants formed three groups to discuss the following key issues:

- I. Community participation and intersectoral cooperation.
- II. Identification of tasks related to leprosy control for the different levels of the primary health care system.
- III. Essential steps in the process of transition of vertical leprosy control programmes into the primary health care system.

Each group had to identify issues for health systems research according to their respective subjects.

The outcome of the discussions was as follows:

7.1 Community Participation and Intersectoral Cooperation

7.1.1 Community participation

In order to improve the effectiveness and efficiency of integrated leprosy control programmes, it is necessary to identify optimal methods for promoting community participation in leprosy control, including those for approaching the community.

Effective participation by a community in decision making can only be expected when the community is well informed. The objective of the requested participation is for the community to assist in the identification of suspect patients, motivating patients to receive regular treatment and to socially accept and support leprosy patients, including care for the disabled.

The information enabling the community to make decisions about their own role should contain basic knowledge about leprosy, its physical and social consequences and its treatment.

The form in which this knowledge is to be imparted will vary from country to country and within a country from area to area, according to local customs of communication, the local perception of leprosy by the community (e.g. stigma), prevalence of leprosy, etc.

The initial approach to village leaders has to be made by recognized health officials who will inform the leaders and the village health workers (who are agents of change) of the need for health education in leprosy. Health education to the community should be given using appropriate methods such as group discussions, play acting and exhortation by religious and political leaders. Furthermore, sensitization by means of posters and/or radio talks will also assist in making people aware of leprosy as a topic for discussion.

These activities should always be undertaken as an integral part of general health education activities, as leprosy should be seen in the context of the whole health problem.

Patients and their families are to be taught on a more individual basis.

It is important that the educator can be seen and heard as belonging to the community; thus a fieldworker from the area can do this job best. It is equally essential that all other health staff categories give the same message when talking about leprosy.

Once a diagnosis of leprosy has been made, the family and friends of the patient should be encouraged to motivate the patient to take treatment regularly in their own interest. The community should feel some common concern for the successful outcome of the treatment.

7.1.2 Intersectoral cooperation

Intersectoral cooperation is most effective at the lowest level where the patient is. However, efficient cooperation can only be achieved when the total health sector - government and NGOs - work together with other sectors to mutual benefit of the patient, otherwise only individual efforts result.

The type of assistance other sectors can give, may be in, for example, equalizing employment opportunities, rehabilitation of patients, agricultural support and support by teachers and religious leaders.

7.1.3 Research

Multidisciplinary research is needed regarding perception of health and disease (in particular leprosy) in order to identify mechanisms for changing the behaviour of the community towards leprosy.

7.2 Identification of tasks related to leprosy control for the different levels of the primary health care system

7.2.1 Outline of tasks for the different levels

Recognizing the need that health-related activities should preferably be undertaken at the most peripheral practicable level of health services by adequately trained workers, the participants agreed upon the tasks related to leprosy control for the respective levels of the primary health care system as shown in Table 2.

The presentation has been limited to a broad outline of tasks which, although not a blueprint for every country, is nevertheless adaptable to the diversity of situations of different countries. Each country will have to define what is the most appropriate level for the tasks identified.

TABLE 2: IDENTIFICATION OF TASKS AT DIFFERENT PHC LEVELS

LEVEL OF PHC SYSTEM	TASKS
Home level	<p>Awareness and recognition of skin symptoms, suspicion of leprosy.</p> <p>Social acceptance of leprosy and encouragement and support of the patient at home.</p> <p>Motivation for continuation of treatment</p>
Community level (community health worker, at home, in the community and in collaboration with first level health facility)	<p>Suspicion of symptoms and signs of leprosy</p> <p>Referral of persons with lesions suspicious of leprosy to health facility</p> <p>Monitor treatment</p> <p>Provide social and moral support to patients and family members and assist in rehabilitation of patients</p> <p>Suspect leprosy reactions, side-effects of drugs and referral</p> <p>Health education - early signs <ul style="list-style-type: none"> - treatment - follow-up - advice on complications (self-care) - motivation/moral support </p> <p>Simple data collection and reporting (e.g. when patients move out of the village or die)</p> <p>Drug delivery (in special cases)</p>
First level health facility (health centre or equivalent)	<p>Diagnosis of leprosy and classification (MB or PB) based on clinical and bacteriological examination (smear-taking should be done at this level. The examination of smears may take place at the first referral level)</p> <p>Initiation and supervision of treatment</p> <p>Diagnosis of complications and their treatment (ulcers) or referral (severe reactions)</p> <p>Training and supervision of community health workers</p>

Education and information of the patients and families regarding: treatment/follow-up and prevention of disabilities

Recording and reporting

Surveillance of patients after release from chemotherapy

First referral level
(district hospital/district)
health administration

Smear examination

Treatment of severe complications including hospital admission

Training and supervision of first level health facility

Planning and organizing district level leprosy control activities

Monitoring and evaluation of first level health facility

Quality Control of performance of first level health facilities.

Recording and Reporting

Higher levels
(e.g. provincial,
regional, zonal, national)

Specialization regarding management of problem cases

Policy decision

Priority setting

Targets establishment

Resource estimation and allocation

Overall planning of national programme

Preparation of standards and guidelines

Training of regional/provincial level managers

Supervision and coordination

Management of logistic support

Epidemiological surveillance

Operational research

Monitoring and evaluation

7.2.2 Role of general public health managers (particularly at intermediate level)

The general public health managers, especially at this level, are often not adequately trained for management functions. Furthermore, tasks and responsibilities of these managers regarding integrated leprosy control programmes are often not clearly defined, especially when there is still some interference by the (former) vertical programme staff (e.g. technical supervision, drug supply etc).

It is felt that this officer should be capable of managing the programme administratively as well as technically. He should have training in management and the ability to cope with leprosy clinical problems, if necessary, through delegation to the technical support system.

7.2.3 Assimilation of vertical staff

It is considered as an important condition to successful integration of leprosy control into the PHC system that the role (tasks and responsibilities) of the (former) specialized leprosy control staff in the integrated programme is well planned beforehand.

The group felt that leprosy staff who have basic qualifications of (parallel) general health staff should be assimilated in the PHC system. However, in the case of leprosy staff who are trained only in leprosy, there is a necessity for further training if they get additional general functions unless they become specialized staff of the technical support system.

7.2.4 Research

There is need for research to identify the most peripheral level of the primary health care system which can deal with each of the various tasks regarding leprosy control.

Health systems research is needed for the identification and validation of indicators of the operational performance regarding leprosy control at the different levels of the PHC system especially the intermediate and peripheral levels.

7.3 Essential steps in the transition of vertical leprosy control programmes into the primary health care system

An ill-planned process of integration, which has unsystematically and uncritically been introduced without scrutiny for possible constraints, may easily lead to failure and to poorer performance of the leprosy programme. A successful transition from vertical to integrated leprosy control programmes requires identification of solutions to these constraints. The list of possible constraints to integration (section 6.2) could be used as a checklist.

The planning and implementation of the process of integration should be a combined effort of the general public health managers and the managers/specialists of the leprosy control programme.

7.3.1 The essential steps in the process of transition as identified in the meeting are mentioned below:

7.3.1.1 Commitment

A pre-requisite for the integration of leprosy into the primary health care system is a commitment to integration by the politicians, professionals, and the community. In order to achieve this, the principle of integration must also be actively advocated by WHO, NGOs and voluntary agencies. The importance of the intersectoral element should be remembered.

7.3.1.2 Situation analysis

A. Infrastructure.

Consideration of the infrastructure should include:

- Organizational structure, including managerial and technical capability;
- Manpower including CHWs;
- Facilities including referral centres and laboratories;
- Communication, supplies and equipment including drugs and transport;
- Reporting systems;
- Financial Resources: governmental, non-governmental and those from recipients, e.g., through health insurance;
- State of affairs regarding community participation and intersectoral cooperation.

The infrastructure in question is of the PHC system, the existing leprosy control programme, other existing vertical programmes, existing voluntary agency programmes and their existing relationships.

B. Leprosy Problem

Consideration regarding the leprosy problem should include:

- Prevalence rates of leprosy;
- Community perception of leprosy including that of staff and patients;
- Current treatment of leprosy;
- Operational performance of the existing vertical programme.

7.3.1.3 Selection of priorities

Based on the situation analysis, the problems to be solved for implementation of optimal integration of leprosy control into the PHC system should be identified. Given the primary objective that all leprosy patients should receive regular treatment with MDT, the activities (e.g. upgrade laboratory services; ensure community participation, etc.) to be undertaken in order to solve these problems should be ranked in order of priority.

7.3.1.4 Development of plan of action

The plan of action should include all activities as identified under 7.3.1.3 above. Some main issues to be considered are mentioned below.

Integration does not mean the disappearance of specialized support. Decisions should be made on the operational level for technical support and its relationship with administrative support, especially regarding technical supervision, referral, training, monitoring and evaluation.

Special attention should be given to a clear definition of tasks including distinction of responsibilities and interrelationship of technical and administrative staff. This requires the formulation of adequate job descriptions for health staff at each level of the PHC system. Attention should be paid to the role of leprosy institutions if existing.

Decisions on the number and type of personnel required at each level of the PHC system should be taken.

For the establishment of an adequate method for the monitoring and evaluation of the performance of all levels of staff within the integrated leprosy control programme, reference is made to the report of a WHO Study Group on Epidemiology in Relation to Control (TRS 716). Routinely collected data from peripheral workers should be limited to data that have direct importance in decision making.

Responsibility for logistics should be clearly defined and procurement of supplies should be safeguarded.

In the situation analysis, the training needs will have been identified. Based on these, appropriate training to facilitate integration should be arranged for:

- existing general health staff
- existing vertical leprosy staff
- mid-level managers
- existing schools for health personnel

Community participation should be ensured.

An adequate budget should be prepared.

A phased introduction (phasing of place and time) should be considered but adequate targeting should prevent unnecessary delay in achieving total coverage of the country.

7.3.1.5 Implementation

Implementation of integration is to be carried out as outlined in the plan of action.

7.3.1.6 Monitoring and evaluation of the process of integration

Monitoring of the process of integration and regular evaluation is of vital importance. Evaluation should be based on targets as defined under 7.3.1.4 and may lead to re-adjustment of targets set. While doing this the impact of the process of integration on the leprosy control performance should be carefully monitored as well.

It was recognized at the meeting that identification of a universally applicable blueprint for all steps in the process of the transition is not feasible, but it was felt that a creative and adequately trained programme manager, using the outline of steps presented above as a guideline, should be able to work out an effective plan of action which is appropriate for his specific situation.

7.3.2 Research

There is a need for research into optimal methods for integrating leprosy control into the PHC system, including cost-effectiveness studies.

There is a need for research for the identification or validation of indicators of the quality of the performance of an integrated leprosy control programme. Such indicators should be directly linked with, and serve as a tool for, decision making. These indicators should preferably be composed from simple data routinely collected at the peripheral levels of the PHC system.

CONSULTATION ON IMPLEMENTATION
OF LEPROSY CONTROL THROUGH PHC

Geneva, 16-18 June 1986, Room E. 110

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