

Leprosy control through general health services – revisiting the concept of integration

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Introduction

Nine years ago, an editorial in this journal discussed the concept and rationale of integration of leprosy control into the general health services and the issues involved in planning the process of integration.¹ It was argued that the integration issue had undergone a revival as a result of four developments in the 1980s and early 1990s:

‘The international acceptance of the primary health care approach, urging decision makers, in keeping with the principle of equity, to acknowledge that leprosy control should be the integral responsibility of community based general health services.’

‘the introduction of multi-drug therapy (MDT), which dramatically shortened the duration of the treatment.’

‘the WHO resolution adopting the goal of attaining elimination of leprosy as a public health problem by the year 2000. ‘Elimination’ is defined as reaching a prevalence below one case per 10,000 population.’² In order to achieve this goal, to which the Member States of the WHO have committed themselves, MDT should be applied to virtually all cases within the next few years. It is obvious that for this purpose the general health services, which usually provide better coverage of the population than vertical programmes, must be involved.’³

‘the need for sustainability of the leprosy services. After the successful implementation of MDT the prevalence of leprosy will be strongly reduced. In most countries it will not be feasible to maintain a costly vertical service under such conditions. The only possibility to sustain leprosy services at the operational level is their incorporation in other health services.’⁴

We have been invited to contribute to this special issue of *Leprosy Review* by revisiting the editorial in the light of the current context of health services development and leprosy control. Firstly, we will consider whether the stated rationale of integration is still valid. We will discuss how recent developments have influenced leprosy control, and what consequences these have had for the integration of leprosy services. Furthermore, we will briefly

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analyse recent experiences with the integration process. Finally, we will assess whether integration is still the appropriate way for sustaining leprosy services.

What were the rationale and concepts of integration and are they still valid?

The editorial starts by explaining the justification for and the definition of integration:

'The basic justification for integration is the principle of equity: optimal health care, also for leprosy patients, consists of general, continuous and comprehensive care. Such care can only be provided by multipurpose, permanent and decentralized health services. General health care means that a patient receives care for the broad spectrum of common health problems, contrary to the care offered by vertical services which only provide care regarding specific health problems. Continuous health care implies the permanent, daily accessibility of the services, contrary to the intermittent availability of vertical services (e.g. monthly clinics). Comprehensive health care means that the patient is cared for by staff who know the personal history and (family) background of the patient.'

Integration means that leprosy control activities become the responsibility of the general health service, i.e. a multipurpose, permanent and decentralized health service, that is as close to the community as possible. Integration does not mean that specialized elements should disappear from the health service. On the contrary, a specialized component must be available within the general health service at the central and intermediate levels for planning and evaluation, the provision of training, technical supervision, advice, referral services and research'.

Today, the quest for equity is more justified than ever, since the gap in health between rich and poor is widening.⁵ Equity requires more accessible leprosy control services, which can be best achieved through multipurpose, permanent and decentralized services. Therefore, the emphasis on health care delivery through general health services remains the rationale for integration.

Another argument for integration, which dominates health policies these days was also highlighted, namely sustainability.⁶ The editorial makes clear that vertical programmes have too many limitations to achieve equitable, cost-effective and, thus, sustainable leprosy services. *'These limitations, most of them interrelated, hinder an optimal relationship between the leprosy services and the community. The low accessibility results in delayed self reporting of leprosy patients and reduced compliance with chemotherapy. These limitations do point to the need for integration of leprosy control into the general health services.'* The current WHO 'elimination' strategy is in line with this concept. The core elements of the strategy focus on improving community access to leprosy services by means of the delivery of MDT by the general health services.⁷

As is indicated in the editorial, combination of vertical programmes is not similar to integration. *'As the combination of vertical programmes is subject to most of the limitations of vertical programmes for leprosy alone, the integration of leprosy control into the general health services is more preferable than combining with another vertical programme. Within the integrated services, however, the specialised technical leprosy component can be combined with that for other diseases'.* Combination of the specialized components for different diseases, e.g. tuberculosis and leprosy, increases their cost-effectiveness, if the more centralized supportive functions (supervision, training, monitoring) are conducted by the same staff, using the same transport, etc. This is already the case in several countries such as

Table 1. Conditions for successful integration of leprosy services¹

- The government should be committed to sustain leprosy control activities, and a national policy on leprosy control should exist.
- Acceptance by the staff and the public of leprosy patients in general health facilities, and willingness of the leprosy patients to attend these facilities.
- The existence of an adequately functioning general health service infrastructure.
- The leprosy service should be of the same quality level (not less, but also not more) as the services for other health problems, to assure equity and quality of care for leprosy patients.
- The process of integration requires careful and adequate planning in advance, and needs to be introduced step-by-step (phasing in place, time and activities).
- The integration process has to be context specific.
- A specialized component must be available within the general health service at the central and intermediate levels for planning and evaluation, the provision of training, technical supervision, advice, referral services and research.
- With integration, the recording and reporting system will require simplification to allow for appropriate data collection by peripheral multipurpose health workers. Only data directly linked to decision-making should be routinely collected. The number of forms, reports or registers should be reduced to a minimum and should be incorporated into an already existing general health management information system.
- Both general health staff and (previous) vertical staff should be extensively trained. Training should be based on clearly defined job-descriptions.
- The incorporation of leprosy control into the curricula of medical faculties and paramedical schools is essential for the successful operation of leprosy control as an integrated part of the general health services and to sustain leprosy expertise within the health services.

Ethiopia, Kenya, Nigeria, Tanzania, parts of Indonesia and Nepal. In other settings a stronger collaboration with dermatological services can be more beneficial.⁸

Establishing integrated programmes is not easy and a number of conditions for a successful integration process have to be fulfilled. The conditions as presented in the editorial are summarized in Table 1. The integration process may be hampered by various factors related to lack of commitment, poor planning and inadequate implementation. *'The factors related to commitment mainly concern the resistance to change among various groups at the different levels of the health system. These problems should be solved by adequate explanation of the concept, rationale and benefits of integration. The problems related to planning and evaluation can be prevented by carefully planning the process of integration. The problems related to implementation should be prevented by adequate preparation and training of the general and previous vertical staff and, especially in the earlier stages, by intensive supervision.'*⁹ It should be clearly explained that the additional workload for the general health staff is only marginal.³

We can conclude that the objectives and concepts of integration are more vital and relevant than ever.

What are the major developments since 1993 that have had an impact on leprosy control and the integration of leprosy services?

Over the last decade, several developments have influenced the context in which leprosy control activities are implemented. The most important are discussed below. Table 2 summarizes how these developments have influenced the integration process.

The prevalence of leprosy patients registered for treatment has been reduced spectacularly, mainly as a result of the shortening of the duration of treatment and the cleaning of

Table 2. Consequences of the changing context for leprosy control

Development	Core issues	(Possible) consequences for leprosy control	(Possible) consequences for integration
Epidemiology	No clear reduction in incidence, while the registered prevalence has decreased	Decreased case-holding workload. Still same number of new patients. Unchanged need for diagnostic, prevention of disability and rehabilitation services	Need to sustain cost-effective and accessible leprosy services
MDT	Successful, simple treatment regimen with limited side effects and very few relapses	Long term availability of cost-effective intervention	Can easily be administered by general health workers
Elimination Campaign	Focus on short term success in terms of reduction of registered prevalence	Misperception among governments and donors that leprosy services are not required any more, resulting in decreased commitment for leprosy control	Integration required as integrated leprosy services are more cost-effective and less donor dependent
Health Sector Reforms	Decentralization (more responsibilities in planning, prioritizing and financing at lower levels)	Enhanced ownership, but also reduced recognition of the leprosy problem, resulting in reduced capacity and resources for leprosy services. Intermediate specialized support element of the service may be affected or even abandoned	May enhance the ownership of leprosy control at the lower levels and thus the integration process. However, it may hamper the integration process if intermediate supportive levels are weakened
	Integration of vertical programmes into the general health services	Increased accessibility of leprosy services (in time and place)	Enhances the integration process of leprosy services
	Changing role of national ministries of health and intermediate levels	Less directive, but more advisory support from higher levels. It may, however, result in reduction in staff of central units of leprosy programmes	May hamper integration process if supportive levels (central and intermediate) are weakened
	Broadening financial options	Fees or other payments may become obstacles if also applicable for leprosy patients (often the poorest groups)	If fees become an obstacle for accessibility they may frustrate the integration process
	Working with the private-for-profit sector	Particularly in urban settings, leprosy patients who report to the private sector can be treated with MDT	May be useful in urban settings to enhance coverage in the integration process
	Supporting health sector wide approach	May change priority setting and thus financing of leprosy control activities. Less possibilities to fund vertical programmes	May enhance the emphasis on integration of leprosy services
	Improving performance of civil service Emphasis on cost-effectiveness	May emphasize the need for cost-effective staff, e.g. multipurpose workers MDT is seen as a highly cost-effective intervention and should be included in basic packages of health	May enhance the process of integration MDT in an integrated setting may be supported

Table 2. Continued

Development	Core issues	(Possible) consequences for leprosy control	(Possible) consequences for integration
Increasing burden of AIDS/HIV, tuberculosis, malaria and non-communicable diseases	Prioritization of AIDS/HIV, tuberculosis, malaria and non-communicable diseases	Less attention for leprosy	Increases the need for collaboration with other disease control programmes and integration of leprosy control services into the general health services for reasons of cost-effectiveness
Demographic changes	Ageing	More elderly people, with more and with long-standing impairments and disabilities	May enhance the need for integration, including the integration of rehabilitation services, in order to increase coverage
	Urbanization	More patients will be detected in urban areas	Collaboration with outpatient departments (OPDs) in hospitals, dermatologists and the private sector may enhance integration. OPDs and private sector are in fact multipurpose institutions
Socio-economic changes	Increasing inequity	May enhance differences in disease patterns and health seeking behaviour	Integration may foster accessibility of free leprosy services
	Reduced government funding for health	Less funds available for leprosy control	May enhance integration process since efficiency of health services is becoming more crucial
Gender issues	Health policies more gender sensitive	More attention for gender factors that influence detection and treatment of leprosy	Integration should be strengthened to enhance accessibility and to reduce the stigma of the disease

registers. Case detection is more or less stable in the major leprosy endemic countries. Fluctuations in case detection rates have particularly been caused by operational aspects such as the implementation of leprosy elimination campaigns.¹⁰ Adequate information on the incidence is lacking.¹¹ Although there are some indications that the incidence of leprosy is slowly decreasing in some countries, the trend usually had already started before the introduction of MDT. There is no evidence that the transmission of leprosy has been reduced due to the (additional) impact of MDT. Current case detection rates indicate that significant numbers of new leprosy cases will continue to occur. They must be detected at an early stage of the disease and submitted to regular and complete treatment with MDT. Many new patients will already show disability at diagnosis, and some will develop disability after diagnosis. In addition, all patients with nerve function impairment will be at risk of developing additional disabilities. Despite the strongly reduced prevalence leprosy services (diagnosis, treatment, prevention of disabilities, disability care, rehabilitation) have to be sustained for decades to come.⁴ Since the case-holding workload has been strongly decreased, it is not cost-effective to maintain a vertical leprosy service. Hence, it is crucial that cost-effective and accessible leprosy services are sustained. Only the integration of leprosy services can ensure this.

MDT has proven to be a highly acceptable treatment. Blister packs and the simplified criteria for classification of PB and MB leprosy have made its utilization relatively simple for

both patients and health staff. The shortened treatment has strongly reduced the case-holding workload. Side effects are rare and the number of relapses limited. The monthly distribution of the blister packs by the health staff offers an excellent opportunity for regular review of the patients. During such occasions leprosy reactions may be detected, disabilities can be assessed and health education can be given. The relative simplicity of leprosy control through the implementation of MDT enhanced the feasibility of the integration of leprosy services.

WHO's 'elimination' campaign has triggered a lively incidence-versus-prevalence debate.^{12,13} When WHO adopted a resolution to eliminate leprosy as a public health problem by the year 2000, elimination was defined as a registered prevalence below one case per 10,000 population. Registered prevalence, however, has several flaws as an indicator for the magnitude of the leprosy problem.^{13,14} Because of the major importance given to the reduction in registered prevalence, the misperception is created that the 'leprosy problem' will soon be over. This is strengthened by the use of slogans like 'final push strategy' and WHO statements that leprosy will die out naturally after a registered prevalence of below 1 per 10,000 population has been achieved.¹⁵ This can lead to reduced commitment, both from donors and national governments, which may result in less resources (human and financial) for leprosy control.¹⁶ Hence, it is important that leprosy services become less donor dependent and more cost-effective. This can be achieved through the integration of leprosy services into the general health services.

Leprosy services do not function in a vacuum, but rather the accessibility and quality of leprosy services are influenced by the health system through which the services are delivered. Health systems are not static entities and substantial changes have taken place in the 1990s, often referred to as health sector reforms (HSR). HSR can be defined as 'sustained, purposeful, and fundamental change in the policies, programmes, and institutions providing health care services'.¹⁷ These reforms are implemented by the government through strategies such as decentralization, involvement of the private sector, change in the role of governments and introduction of new funding mechanisms. The integration of disease control programmes into the general health services is usually an explicit strategy of the HSR. Some of the consequences of the HSR strategies are discussed in Table 2. Leprosy control programmes should take a proactive stance towards these reforms, to ensure that the opportunities for integration are not missed, and that the quality of services is maintained at the same time.

While in many countries leprosy has been regarded in the past as a priority disease, these days other diseases such as AIDS, malaria, tuberculosis and non-communicable diseases have taken over the forefront.^{14,18} Though such shifts in priorities are justified, this should not occur at the expense of leprosy control. Stronger collaboration is required with other disease control programmes at the central and intermediate levels, and full integration at the service delivery level.

Some important demographic changes that started some decades ago, have now begun to accelerate. The number and proportion of elderly people is increasing, because life expectancy is rising in most countries and relatively less children are born.¹⁹ Middle and low income countries are also encountering these changes. Hence, patients may survive longer with their disabilities and more elderly disabled leprosy patients will require treatment and care. Increasing demands for rehabilitation services can only be cost-effectively addressed through integrated rehabilitative services, i.e. services that target all kinds of impairments and disabilities and not solely one specific disease. Another demographic trend relates to urbanization. An increasing proportion of patients will be detected in urban settings,

often at outpatient departments by dermatologists in hospitals and by the private-for-profit health sector. Leprosy control programmes have to liaise with these facilities in order to ensure that patients are adequately treated.

Recent socio-economic changes, such as the economic crises in Africa and Asia and the consequential adjustment programmes, have most likely had a negative impact on a poverty related diseases,²⁰ including leprosy. Although general wealth may have increased on the whole, the vulnerability for diseases has increased in several groups in society. The capacity of many countries to protect these vulnerable groups through adequate social sector provisions, including health, has been reduced over the past years. Given these developments, it has become even more vital that the scarce resources for the health sector be allocated to an efficient, accessible, integrated, general health care system. Leprosy services should be part of such an integrated system, in order to ensure their sustainability.

There is an increasing awareness of gender issues in the health care system. Many leprosy related gender differences exist, both biological as well as socio-cultural.²¹ For instance, gender plays a role in lower case detection rates for women, as women often have less access to health services than men.²² Women with leprosy often face a double jeopardy; their socially inferior status and stigmatized disease result in greater social and mental problems, even if the disease may be physically less severe than in men.²³ Integration enhances accessibility and may also diminish the stigma of leprosy as a 'special' disease requiring 'special' services.

The developments that have changed the context in which leprosy control is implemented, mostly emphasize the need to integrate leprosy services. Some of them facilitate this process, whereas others point out that integration is an appropriate strategy to ensure the sustainability of leprosy services.

Nowadays, it is generally accepted that integration is the way forward. The WHO Expert Committee on leprosy stresses in its seventh report that integration 'could improve the awareness of the local community, case-finding and accessibility of patients to MDT, and could help to ensure the regularity of treatment'.²⁴ Consequently, integrated programmes would be more appropriate to strengthen leprosy elimination activities rather than vertical programmes. In more recent publications, WHO also points out that 'integration is currently regarded as the key to elimination'.⁷

Has it been feasible to integrate leprosy services into the general health services? What have been the experiences so far?

During the last decade efforts have been made in several countries to integrate leprosy services into the general health services. Recent experiences, including those presented in this edition of *Leprosy Review*, are summarized in Table 3.

Although the experiences are diverse, several countries have shown that integration of leprosy services into the general health services is feasible and that an integrated leprosy control programme can function effectively. Recent experiences also indicate that there are many different approaches regarding the planning and implementation of the process of integration. Every setting, even within the same country, may require its own specific approach.

However, significant problems have been encountered, usually caused by inadequate planning of the integration process, for instance in relation to training of the relevant cadres.³⁶

Table 3. Recent experiences with integrating leprosy control services into the general health services

Country	Experiences
Ghana ²⁵	In Ghana the integration process was implemented in a phased manner. Firstly, administrative functions were devolved to the regions and the health care managers and providers in leprosy control were primed. Then, the specific functions were handed over to district and sub-district levels and were gradually expanded (management of drug supply, record-keeping, diagnosis, medical care). Finally, the capacity at district level was strengthened to recognize and manage complications of leprosy. It was possible to implement this process in nine out of the 10 regions. The integration process has particularly been successful in bringing the services closer to the communities. Furthermore, during the process the number of new cases increased, the stigma reduced and training was incorporated into the curricula of all health training institutions. However, substantial constraints were observed when leprosy technical officers felt threatened by the changes and had difficulties in coming to terms with new responsibilities.
Nepal ²⁶	Besides i) adequate training, ii) an adequate supply of drugs and equipment, and iii) regular supervision and specialist referral facilities, integration also requires iv) well-functioning basic health services. If the development of the general health system is not optimal, as was the case in Nepal, a certain vertical structure remains justifiable (centrally or regionally) for effective integration at the lower levels. In the districts with less-developed health systems, the (semi-) vertical structure of leprosy control work needs to be continued until the general health systems are ready for integration.
Myanmar ²⁷	In Myanmar MDT was already introduced in a vertical leprosy programme. Some years later the services were integrated into the general health services, particularly by utilizing the multipurpose midwives, who work in the communities. These midwives, who have various tasks, show a high level of commitment and reliability. Midwives did not perceive leprosy activities as an extra burden, and were mostly able to perform leprosy activities with other health activities. Thus, leprosy services were implemented by the multipurpose midwives without hampering other health services and without involving extra allowances for these activities.
Ethiopia ^{28,29}	The tuberculosis and leprosy control programmes have been combined since 1994. The process of combining the specialized supervisory components of the two programmes, and integrating the case detection and treatment activities within the general health services, started in 1997 in Arssi Zone, with prior training of the general health staff of peripheral health facilities. The trained workers started to provide daily tuberculosis and leprosy services under the direct responsibility of the district health services. On the basis of the Arssi experience, which demonstrated that leprosy and tuberculosis activities can be effectively implemented by general health staff, the integration process has been started in several regions throughout the country. The planning of the integration process is based on a step-by-step approach that clearly spells out the consecutive steps to be taken according to a time-frame, which can be adapted to the different local situations. Significant progress towards integration is reported, although the planning and implementation was inadequate in some regions, with the result that MDT services in some clinics were interrupted.
India ³⁰⁻³³	In 1997 Tamil Nadu became the first state in India where integration took place throughout the whole state. It was effectuated at once, to circumvent the prevailing climate of resistance, particularly among vertical leprosy staff. After one year an evaluation of the process concluded that integration had been accepted by most stakeholders, but that the lack of a phased integration process resulted in a number of shortcomings. These included inadequate training of general health workers, inadequate information to the patients and community at large, disruption of referral channels, and lack of clarity regarding supervisory roles. Actually, many workers had still to be trained after integration had already been established. This resulted in the situation that, although MDT provision was handled by all general workers, diagnosis and record-keeping were almost exclusively done by previous vertical workers. Patients were generally satisfied with the leprosy services at the general health facilities, although the care for complications was not considered as

Table 3. Continued

Country	Experiences
Nigeria ³⁴	adequate. A well planned process with the involvement of all stakeholders would have prevented the shortcomings. The conclusions are endorsed by other recent experiences in India. An additional problem is that, in some areas, integration is not well established since (a remainder of) the vertical system is still maintained alongside the 'integrated' leprosy services conducted by the general health staff. In Jigawa State the momentum and financial opportunities created by the leprosy elimination campaign were utilized to expand and integrate leprosy services into the general health system. In order to achieve integration the process was well planned, particularly since it implied substantial changes in the daily operations of the services. Such changes can only be achieved if there is sufficient commitment and understanding of the advantages of integration. An earlier attempt towards integration failed because of lack of support for the integration process. The vertical leprosy staff in particular had to accept their new roles in the integrated programme. The fears and reservations of the general health workers towards leprosy, however, had also to be addressed. Though final conclusions cannot yet be drawn, the available data indicate that the coverage and accessibility has increased substantially through integration. At the same time, the quality of the leprosy services has, as far as can be assessed, been maintained.
Sri Lanka ³⁵	Before 1999, the leprosy services in Sri Lanka were provided through a national network of field clinics, in which leprosy public health officers diagnosed and treated patients. When the decrease in the registered prevalence required a more cost-effective solution, the Ministry of Health of Sri Lanka decided to integrate leprosy services into the general health services. Through a consultative and participatory approach an integration policy was developed, which included a clear vision for the integrated system and a detailed implementation procedure, highlighting the new responsibilities for diverse health workers, including the role of dermatologists as referral address for complicated cases. Importantly, sufficient time was taken before the actual implementation took off in February 2001. Crucial aspects of the implementation were the reorientation of the curative sector and a national advertising campaign to create awareness of the availability of leprosy treatment at all health facilities as well as to overcome the stigma attached to leprosy. Furthermore, patient cards and registers were simplified, particularly to facilitate analysis of data at the lower level. Good communication was ensured through regular meetings in order to address emerging constraints. As a result of this process, the prevalence increased by 36% and the case detection by 41%. However, the process is far from over, and will require continuous support in the coming years.

In addition, support and guidance from the various administrative levels during the implementation of the process has often been insufficient. As a result reservations have been expressed regarding the capacity of general health services to provide adequate leprosy services.³⁷ Indeed, an over hurried, ill planned process of integration may easily result in a deterioration of the leprosy services with dramatic consequences for the leprosy patients. This clearly points at the huge risks involved in pushing integration without giving sufficient attention to the conditions that have to be fulfilled for a successful process of integration.

Apparently not all countries have made use of the lessons learnt in other countries, which had already been reported more than 10 years ago in a specific WHO document³⁸ and various other publications, including the revisited editorial in this journal. Clearly, the integration process requires a proactive approach from leprosy control programmes as well as the general health services and needs a careful preparation. Health systems research can be useful to identify and address the hurdles that have to be overcome in the integration process.³⁹ This

Table 4. Lessons learnt.

- Planners often underestimate the efforts involved in the process of integration as well as the preparations required.
- The documented experiences from other countries should be better utilized, even though the integration process has to be adapted to the specific local situation.
- A well-functioning central unit in the Ministry of Health (MOH) should provide guidance in the process of integration.
- An adequate, well prepared supportive structure at the intermediate level is not only required when leprosy services have been integrated into the general health services, but is also necessary during the process of integration.
- An uninterrupted supply of anti-leprosy drugs must be guaranteed.
- The tasks of the different categories of staff in the integrated programme (including previous vertical staff) should be clearly defined and communicated to all concerned long before integration is effectuated. The same applies for the training: all categories of staff should have completed their training before the integrated programme becomes operational.
- A simplified recording and reporting system, incorporated into the already existing general health management information system, should be in place before integration is effectuated.
- Though the integration process should be implemented in a step-wise mode, it is still important to achieve early results. This is necessary to maintain commitment.
- A professional advertising campaign to create awareness of the availability of leprosy treatment at all health facilities as well as to overcome the stigma attached to leprosy, can strongly facilitate a successful integration process.
- The planning of the process of integration could be facilitated by organizing a workshop according to guidelines laid down in the ILEP document 'Sustaining leprosy related activities'.
- Special initiatives, such as leprosy elimination campaigns, can be used as opportunities to start or strengthen the integration process.
- Health systems research can be useful to identify and address the hurdles that have to be overcome in the integration process
- It is important that the various agencies involved in leprosy control collaborate and co-ordinate their activities in order to increase their effectiveness. Donor agencies wanting to support the establishment of sustainable leprosy services must invest in national general health services infrastructures.⁴

process can also be facilitated by using the guidelines as laid down in the ILEP document 'Sustaining leprosy related activities': through 'sustainability workshops' appropriate strategies can be identified and an action plan be formulated.⁴⁰

Though integration enhances the sustainability of leprosy services, integration does not necessarily imply that leprosy services will inevitably become sustainable. A number of conditions have to be fulfilled to achieve sustainable and effective integrated leprosy services. From the experiences listed in Table 3, it appears that the conditions as summarized in Table 1 are still relevant. In addition, important lessons learnt since the publication of the editorial complement these conditions (Table 4).

Conclusion

The concepts and rationale of integration, as outlined in the editorial of 1993, are still valid. In addition, recent developments that have shaped the context of leprosy control programmes, reinforce the importance of integrating leprosy control activities into the general health services. Integration has become the major strategic component of the WHO leprosy 'elimination' strategy and will remain a core challenge for the coming years. The need for integration has been recognized in virtually all leprosy endemic countries and an increasing number of countries has embarked on the integration of leprosy control. It has been shown that leprosy control can be adequately implemented by the general health services. However,

integration is often undertaken rather haphazardly, without proper planning. The same mistakes are repeated in different countries. This is unfortunate, since a lot of experience has been documented and has been made available in reports and publications. Much more use should be made from the lessons learnt during these experiences.

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