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SPECIAL ARTICLE

Achieving multidrug therapy for all leprosy patients—ILEP Medical Bulletin*

The ILEP goal of multidrug therapy (MDT) for all leprosy patients before the year 2000 was accepted in 1990. This goal is fully consistent with, if not even more ambitious than the WHO goal of the elimination of leprosy as a public health problem, adopted by the World Health Assembly in 1991.

In order to review the progress towards the ILEP goal and to ensure that this goal will be achieved, the ILEP Medical Commission organized a survey in which 228 leprosy projects participated. The outcome of the survey confirmed the belief that many leprosy programmes have difficulties in achieving effective MDT implementation, i.e., full MDT coverage and adequate MDT completion rates.

The following issues were considered as crucial:

— Not all cases are on MDT, WHY?
— Many cases, who were submitted to MDT, do not complete their treatment, WHY?
— How should the problems causing inadequate MDT coverage and/or inadequate MDT completion be solved?

The major findings and recommendations related to the above issues were published in an ILEP Medical Bulletin, reprinted below. This Medical Bulletin was produced by a Temporary Expert Group of the ILEP Medical Commission and endorsed by the Medical Commission in December 1994. At an Interface Meeting with ILEP Member Associations in December 1994, ILEP Members expressed their commitment to achieving the 1995 interim target outlined in the text.

The Medical Commission gratefully acknowledges the assistance of ILEP Members and the contribution of the 228 leprosy projects who took part in the survey in order to identify the current constraints on and solutions to MDT implementation.

P. FEENSTRA

Chairman of ILEP Medical Commission,
Leprosy Unit, Royal Tropical Institute,
Witbautstraat 135, 1097 DN Amsterdam,
The Netherlands

1 INTRODUCTION

The ILEP Medical Bulletin No. 1 of September 1990 stated the Medical Commission's view that Multidrug Therapy (MDT) should be given to all leprosy patients in need of chemotherapy.[1] Because of the danger of drug resistance there is no justification to treat patients with any monotherapy.

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Many programmes have already achieved effective MDT implementation, that is all their patients registered for chemotherapy are being treated with MDT (100% MDT coverage) and the proportion of patients successfully completing their treatment within the specified time period is adequate (more than 75%). However, several programmes are experiencing difficulty in achieving 100% MDT coverage and high treatment completion rates.

It is important to understand the reasons why some programmes find this difficult and at the same time learn how other programmes have succeeded. For this purpose, the ILEP Medical Commission organized in 1994 a questionnaire survey of 228 field projects in Africa, Asia, Latin America and Europe with a total of 239,574 leprosy patients registered for chemotherapy. The survey covered about 40% of the projects and patients supported by ILEP Members. The recommendations in this Medical Bulletin are based on the results of this survey and an analysis of the ILEP B forms (the project annual report) for the year 1993. The focus is on the major issues and the frequently reported obstacles to achieving MDT for all leprosy patients.

Although this Bulletin is primarily aimed at programmes which have difficulties in achieving full MDT coverage and high treatment completion rates, the recommendations may also be useful for programmes with full MDT coverage wishing to increase the cost-effectiveness of their operation. Implementation of the recommendations will assist the attainment of the ILEP goal of 'MDT for all leprosy cases by the year 2000' as well as the WHO goal of 'Elimination of leprosy as a public health problem by the year 2000'.

2 MAJOR FINDINGS

— At the end of 1993, 1 in 3 of the patients registered for treatment in programmes assisted by ILEP Members were not receiving MDT (worldwide almost 1 in 2 of the patients registered for treatment were not on MDT).
— More than 22% of the programmes still prescribe dapsone monotherapy to some of their new patients, although this treatment has been considered obsolete for more than a decade.
— More than 10% of the new patients detected are not started on MDT.
— 1 in 4 projects report that less than 75% of the patients who started MDT completed their prescribed course of MDT within the required period.

3 RECOMMENDATIONS FOR ACHIEVING FULL MDT COVERAGE AND ADEQUATE COMPLETION OF TREATMENT

Too many opportunities to implement MDT are being missed. The major obstacles to effective MDT implementation can be categorized into **patient management obstacles** and **programme management obstacles**.

3.1 PATIENT MANAGEMENT OBSTACLES

(a) Inappropriate prerequisites and contra-indications for MDT

Problem:

Many programmes still apply inappropriate prerequisites be fulfilled before patients can be started on MDT. Inappropriate contra-indications for MDT are still widely used.

Example:

Several programmes report that they exclude from MDT persons who are elderly, who have TB, who are pregnant, who live far away (e.g. more than 10 km), who cannot come to the clinic every month, who have no fixed address, who have mental disorders, hypertension, etc.

Recommendation 1

MDT must be given to all leprosy patients except in the rare case of severe liver disease or serious drug hypersensitivity.

(b) Delay between diagnosis and the start of MDT

Problem:

Often there is a delay between the diagnosis and the start of MDT. During this delay, patients receive only dapsone monotherapy or no treatment at all.

Example:

Patients have first to prove that they collect their treatment regularly before they 'qualify' for MDT; the results of skin smears or biopsies are to be known before MDT can be started (even if the diagnosis was confirmed on clinical grounds); staff have to check the residence address of the patient, etc.

Recommendation 2

All patients should be started on MDT at the time of diagnosis.

(c) Inadequate review of patients registered for dapsone monotherapy

Problem:

Many projects have not yet started or completed the screening/updating of their old treatment register.

Example:

Some projects have many patients on register for dapsone monotherapy who have not reported for several years or who are already cured and are not in need of treatment any more. These patients are included in the calculation of MDT coverage resulting in an unrealistic low figure.

Recommendation 3

All projects which still have patients registered for dapsone monotherapy should as soon as possible review all these patients and decide whether they should be either released from treatment or be started on MDT. All patients eligible for anti-leprosy chemotherapy should be submitted to MDT at the time of screening.

(d) Inflexible system of drug delivery

Problem:

Several programmes do not provide more than a 1-month supply of drugs, even when a patient has a valid reason to justify this.

Example:
Patients who cannot come every month to the leprosy clinic because of long absences (e.g. patients living far away, those in areas inaccessible during the rainy season, patients who cannot afford to lose their wages during the harvest season, women, sailors, etc.) or occasionally (e.g. marriage, childbirth, funeral, pilgrimage etc.).

Recommendation 4

Patients should receive their monthly pulse dose under the supervision of health staff. Where this is not possible, treatment should be supervised by a reliable person, e.g. community leader or family member. In circumstances where supervision of drug intake is impossible, patients who cannot attend every month should be given a supply of drugs for several months.

(e) Unnecessary continuation of treatment

Problem:
Several programmes still continue Multibacillary (MB) MDT until the skin smears are negative and Paucibacillary (PB) MDT until skin lesions have become inactive. This may result in low reported treatment completion rates.

Example:
MB patients who have already completed 24 monthly doses but were kept on MDT and default before the skin smear is negative are in these programmes considered as 'treatment not completed'.

Recommendation 5

Fixed duration MDT for MB leprosy, that is treatment with 24 monthly doses within 36 months has been recommended by the ILEP Medical Commission[1] and by WHO[2] and should be implemented in all leprosy control programmes. For PB leprosy fixed duration of treatment, i.e. treatment with 6 monthly doses within 9 months has always been the recognized standard and should be adhered to.

(f) Inadequate patient education

Problem:
Many programmes report inadequate patient education as a major factor responsible for low treatment completion rates.

Example:
Patients stop taking treatment because of improvement of the lesions or because of drug side effects or leprosy reactions and nerve function complications.

Recommendation 6

Leprosy control programmes must give a high priority to patient education. All levels of staff should be adequately trained in patient education and appropriate patient education materials should be used.

(g) Inadequate patient care

Problem:
Inadequate patient care does not only result in the occurrence of disability which could have been prevented but contributes to low treatment completion.

Example:
Patients who during MDT develop disabilities because of inadequate reaction treatment, lose confidence in the programme and may default from MDT.

Recommendation 7

Adequate patient care, including early detection and treatment of nerve function impairment and the prevention of worsening of existing disabilities, should be an integral part of all leprosy control programmes.

(h) Inadequate procedures regarding absentees

Problem:
Many projects do not implement adequate absentee retrieval procedures.

Example:
Several projects, especially those which are hospital based, do not implement any activity for the retrieval of absentees (e.g. letters, messengers, messages via other patients, village health workers or village heads, home visits, etc.).

Recommendation 8

All programmes must have a standardized absentee retrieval procedure appropriate to local conditions. Projects which do not have staff for retrieval activities should closely collaborate with existing control programmes. As a rule all patients should be referred to the treatment delivery point nearest to their residence.

3.2 PROGRAMME MANAGEMENT OBSTACLES

(a) Inadequate management capacity

Problem:
Most programmes with low MDT coverage have inadequate organization and management capacity as an important cause for deficient MDT implementation.

Example:
Several national, regional and/or district programme managers have difficulty in planning the expansion of MDT coverage. Some are unable to identify weaknesses in their programme through routine monitoring and many do not know how to identify solutions for difficult or unusual situations.

Recommendation 9

Programme managers from the national, regional and district levels should receive training in relevant aspects of routine programme management.

The application of the WHO and ILEP management training modules should be expanded.[4,5] Where appropriate, training in specific problem solving management (health systems research) should be undertaken.

(b) Lack of standardized operational guidelines

Problem:
Many programmes do not have uniform, standardized operational guidelines for health workers giving guidance on patient management and operational procedures.

Example
Lack of guidelines leads to confusion and uncertainty among field workers resulting in a low-quality programme.

Recommendation 10

All leprosy control programmes should have well-defined, practical, operational guidelines in the form of a national leprosy control manual.

Programmes which do not have such a manual should make use of the ILEP publication *Guidelines for writing a health workers manual for leprosy control.*[3]

(c) Inadequate recording and reporting system

Problem:
Many programmes are unable to report treatment completion rates.

Example:
Programme managers who cannot monitor treatment completion rates are not aware of the quality of MDT implementation in their programmes.

Recommendation 11

Effective MDT implementation involves not only full MDT coverage but also adequate MDT completion. Therefore, the assessment of treatment completion rates should be included in the routine monitoring of the programme performance.

Problem:
Many programmes keep absentees too long on the treatment register.

Example:
Patients are kept on the register who have not reported for more than 5 or even 10 years.

Recommendation 12

All patients who have not reported for treatment for more than 2 years and who have been subjected to absentee retrieval action should be deleted from the treatment register.

(d) Insufficient facilities and/or trained staff

Problem:
Many programmes with low MDT coverage report a lack of health facilities (clinic buildings, in-patient facilities, laboratory, vehicles) and/or staff, whilst they do not involve the general health services facilities or staff.

Example:
A peripheral leprosy worker stationed near a general health centre cannot regularly visit an isolated village with many patients and has therefore kept the patients in that village on dapsone monotherapy. He could have involved the general health centre whose staff are visiting the village at least once a month in order to supervise the village health workers of this village. Some programmes who do involve these workers only allow them to supply patients with dapsone monotherapy.

Recommendation 13

Leprosy control programmes should involve the general health services facilities and staff for the implementation of MDT wherever possible. Where peripheral staff are

insufficiently trained for the diagnosis and treatment of leprosy and its complications, this should be urgently corrected.

(e) Inadequate supply of MDT drugs

Problem:

Some programmes experience an insufficient supply or interrupted stocks of MDT drugs.

Example:

Due to inadequate planning, failure of communication, delays in transport, or no budget allocated for the transport of drugs, patients do not get their MDT when they report for treatment. This results in reduced credibility of the programme and consequently reduced treatment completion and can lead to a reduction in self-reporting by new patients.

Recommendation 14

Programme managers should secure a regular uninterrupted drug supply. MDT drugs should be ordered in advance, including the maintenance of an adequate buffer stock. Programme managers should continuously monitor drug stocks at the periphery. Needs should be promptly communicated to suppliers.

(f) Lack of infrastructure or security problems

Problem:

Some programmes fail to implement MDT in very isolated, difficult to reach areas without any health services infrastructure or in areas with security problems.

Example:

Even where MDT has been successfully implemented for a number of years, some projects reach a situation where the remaining patients are located in difficult areas. This results in a reporting of lower MDT coverage rates. Although in general this is not a constraint at the initial stages of starting MDT, it will become relatively more important in the future, not only at the programme level but at the global level.

Recommendation 15

Creative solutions should be developed for these special situations. In general, the solution should be specifically developed for the unique local situation.

4 CONCLUSIONS

The ILEP goal of MDT for all by the year 2000 aims to bring MDT to **all** leprosy cases.

At present, far too many leprosy patients do not yet benefit from MDT. This concerns mainly patients in areas with inadequately organized and/or managed leprosy control programmes or patients living in geographically difficult access areas or areas exposed to civil insecurity.

With the application of the above recommendations, it should be feasible to achieve the ILEP goal.

The following intermediate target will assist in securing the goal:

With the exception of those areas, which have a complete lack of infrastructure or suffer from civil insecurity:

By the end of 1995, all cases registered in the projects currently supported by ILEP Members should be on MDT.

References

[1] *Basic requirements for implementation of Multidrug Therapy.* ILEP Medical Bulletin No 1, Sep. 1990.
[2] *Chemotherapy of Leprosy.* Report of a WHO Study Group, WHO Technical Report Series, no. 847. WHO, Geneva, 1994.
[3] *Guidelines for writing a health workers manual for Leprosy Control.* Vols 1 and 2, ISBN 0947543 11, 1994. Available from TALMILEP, c/o TLMI The Leprosy Mission International 80, Windmill Road, Brentford TW8 0HQ, U.K.
[4] *Managing Programmes for Leprosy Control* (Training modules). WHO, Leprosy Unit, Geneva. 1993.
[5] *ILEP Functional Management Tools Training Module.* (In preparation).