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Contents

WHO Study Group on Chemotherapy of Leprosy

Geneva, 1–5 November 1993

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1. Introduction

A WHO Study Group on Chemotherapy of Leprosy met in Geneva from 1 to 5 November 1993. Opening the meeting on behalf of the Director-General, Dr S. K. Noordeen, Chief Medical Officer, Leprosy Control, recalled that a WHO Study Group on Chemotherapy of Leprosy for Control Programmes had recommended the introduction of multidrug therapy (MDT) for leprosy in 1981, at a time when global efforts to control the disease were meeting with little success, owing to the widespread occurrence of dapsone resistance. Describing this as a bold and balanced decision, Dr Noordeen noted that the critical role of MDT in the successful control of the disease was now well recognized.

Some 4.3 million patients had already been cured through MDT[1] and the number of cases of leprosy had been reduced by two-thirds. Efforts still had to be made, however, to simplify the administration of MDT, to improve accessibility for patients with special needs (e.g. those living in remote areas), and to derive the maximum benefit from the new antileprosy drugs. Even though leprosy could be successfully controlled through chemotherapy, it was important to monitor the situation constantly for problems such as drug resistance and to develop even more effective drug combinations.

The objectives of the present Study Group were as follows:

- To review the information collected since 1981 (the year when the WHO MDT regimens were introduced) and to recommend any modifications of these regimens that seemed appropriate in the light of the data collected.
- To make recommendations regarding the use of the new antileprosy drugs in the chemotherapy of leprosy.
- To make recommendations regarding changes in the operational aspects of chemotherapy of leprosy which would further strengthen efforts to control and eliminate the disease.
- To identify further research needs in order to improve the chemotherapy and control of leprosy.

1.1 WHO Study Group on Chemotherapy of Leprosy for Control Programmes, 1981

When the WHO Study Group on Chemotherapy of Leprosy for Control Programmes met in 1981, leprosy control programmes faced a variety of serious constraints that not only threatened to hinder further progress but, left unchecked, could have resulted in a serious deterioration of the world leprosy situation. Widespread secondary dapsone resistance was being reported in up to 19% of patients previously treated with dapsone

[1] As of April 1994, it is estimated that over 5.6 million leprosy patients have been cured through MDT.

monotherapy. Of equal concern, primary dapsone resistance, mostly low degree, was being detected in some areas in as many as 50% of newly diagnosed, previously untreated cases (*1*). Furthermore, cases of resistance of *Mycobacterium leprae* to rifampicin and the thioamides had been reported among patients receiving these drugs as monotherapy. However, most control programmes had failed to appreciate the seriousness of the situation and thus had not implemented even the limited MDT regimens recommended in the fifth report of the WHO Expert Committee on Leprosy (*2*).

After reviewing the situation and data on the available drugs and from ongoing drug trials, the 1981 Study Group recommended that all leprosy patients (paucibacillary and multibacillary) be treated with regimens that would be effective in cases of dapsone resistance, but were also of relatively short duration. The recommended regimen for paucibacillary leprosy involved rifampicin and dapsone, administered for 6 months, while the regimen for multibacillary disease involved both these drugs, together with clofazimine, given for 24 months or until skin smears became negative. In addition, new simplified definitions of paucibacillary and multibacillary leprosy were introduced and operational guidelines were drawn up to help assure the successful implementation of the new regimens.

Within a few years these now standard WHO MDT regimens were widely implemented and the level of implementation has steadily increased over the past 12 years. The regimens have proved highly successful in preventing relapse. Indeed, the success of these regimens and the concurrent efforts by Member governments and nongovernmental organizations to strengthen leprosy control programmes led the World Health Assembly in 1991 to set a goal of elimination of leprosy as a public health problem (reducing the prevalence to below 1 per 10000 population) by the year 2000.

Although progress towards this goal has been excellent, it is appropriate at this time to review the chemotherapy of leprosy in the light of 12 years of experience with the current MDT regimens and the recent introduction of several new bactericidal antileprosy drugs.