

## CORRESPONDENCE

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## Impact of Multidrug Therapy on the Treatment and Control of Leprosy

## TO THE EDITOR:

In the LEPROSA prize-winning essay that appeared as an editorial in the September 1991 issue of the JOURNAL, Mr. John Gilbody has made a critical reference to an editorial article of mine on the World Health Organization (WHO)-recommended multidrug therapy (MDT) <sup>(1)</sup>. Mr. Gilbody has somewhat mixed up the contents of my editorial, the THELEP response to it, and my countercomments. It is better and easier to take these up point-wise.

1. When he says I proposed "replacing MDT with a staggered form of therapy," he makes a fundamental error. MDT is multidrug therapy, treating with more than one drug, and since there are multiple antileprosy drugs available, there would be various combinations of them administered in different dosages and periodicity. Mr. Gilbody has been misled here into believing that only the WHO-recommended combination constitutes MDT.

2. In my editorial I have not recommended 6–8 weeks of daily rifampin (RMP), but a combination of rifampin and clofazimine (CLF) daily for the initial 6–8 weeks, and this also is multidrug therapy. Reading Mr. Gilbody's version, one would conclude that I recommended RMP monotherapy for the first 6–8 weeks. It is only after this initial intensive phase of treatment that I have recommended withholding RMP, bringing in dapson (DDS) in its place, and continuing with dapson and clofazimine for another 10–12 months.

3. He cites the Letter to the Editor of the *Indian Journal of Leprosy* by Grosset, *et al.* <sup>(4)</sup>, reacting to my editorial article, as a reference from among a number of studies that refuted Gelber's report <sup>(3)</sup> on the synergism and efficacy of the combination of RMP and CLF in an experimental system which I cited as supportive of the premise of my kind of multidrug combination (therapy). This obviously was not one of a number of similar studies, but a written sort of defense of the WHO regimen and refuting my ideas; it certainly was neither a study nor based on a study.

4. Penicillin was mentioned nowhere in my editorial; I only mentioned it in my response to the Letter to the Editor from the THELEP leaders <sup>(2)</sup>. On bactericidal-bacteriostatic antagonism, I had to refer to an article by Plotz and Davis <sup>(5)</sup>, showing antagonism between streptomycin and chloramphenicol; it was not penicillin and chloramphenicol as Mr. Gilbody alludes. The only mention of penicillin, again not in the editorial article but in my response <sup>(4)</sup>, was when I pointed out that penicillin, strictly speaking, was not bactericidal—one can keep the wall-deficient forms viable and multiplying in media that protect the cytoplasmic membrane, and penicillin-induced latency of infection through L-form transformation is a well-known phenomenon.

5. Mr. Gilbody's conviction on the efficacy of only the MDT regimens for multibacillary (MB) and paucibacillary (PB) leprosy as recommended by the WHO is

obviously literature-borne. As a consultant leprologist, I have to deal with thousands of cases in whole districts, and I am not so convinced of the efficacy of these MDT regimens. "Two hundred seventeen (217) MB cases were started on the MB regimen and followed carefully . . . at the end of 36 pulses—three years of therapy—167 patients (77%) were declared inactive (cured), 127 of them having become so after the 24th pulse . . . that left 50 patients still on MDT . . . with 'active' Hansen's disease. Of these, 15 were smear-ve and 35 (18%) were not only still bacteriologically + ve, but SHOWED NO FALL IN THEIR BACTERIOLOGIC INDEX (BI). This result concerned the Chilakalapalli team enough for them to consult the WHO consultant on Hansen's disease for the district, Dr. Mrs. Thangaraj. To verify the clinical and bacteriological findings of these 35 patients, two separate teams of doctors, on two occasions, examined the patients at Chilakalapalli and took smears. Slides were taken by the respective teams and examined. The BI of these cases as per the cross-check was in conformity with that being reported by the unit . . . . The other question that might be raised . . . 'Are the patients actually taking their drugs?' In this unit, at least, there can be no doubt whatever that they are."

Chilakalapalli is one of the old, nodal units of the Gandhi Memorial Leprosy Foundation. Rather than my own data, I have cited here the experience of Christopher D. Corcos, a final-year medical student from England who spent some time of his overseas elective stint in this MDT project in Andhra Pradesh in India (The Star, Sept/Oct 1987).

Many MDT consultants in India, particularly the senior ones, felt sufficiently disturbed to meet at a workshop in Madras on 5 October 1991 to discuss the MDT regimen, the length of it, if what we were doing was sufficient, and the criteria of classifying a case as PB leprosy. A proportion, albeit a minority, of the participants was inclined to recommend one regimen only for both MB and PB leprosy with the latter receiving a suitably shorter duration, and some were

quite plainly apprehensive of the immunosuppressive effect of dapsone which was thought to be a factor that possibly retarded the decline of the BI. For administrative compulsion and expediency, multidrug regimen projects report 98%–100% compliance at drug delivery points, cure is reported based on somewhat arbitrary criteria, and a large majority of the units are not equipped to do smear examination. Under actual field conditions things are very different from what appear in print. While saying all this, I am not implying that the multidrug regimen projects have had no impact. But surely there are better bases of multidrug combinations and better ways of putting MDT into practice, unless one wants to be satisfied with the dictum "half a loaf is better than nothing." Supportive of the concern of MDT consultants was Wayne Meyers' observation, ". . . six months of MDT may be too short for PB patients. Personal experience suggests that many patients classified clinically as PB are histopathologically MB and should receive an MB regimen." (The Star, March/April 1991).

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