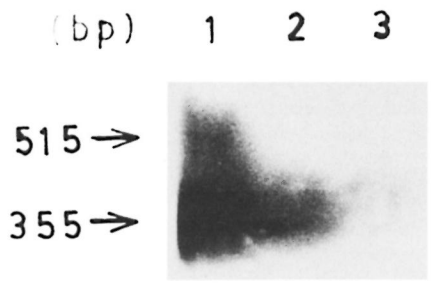

FIG. 3. Southern hybridization of IFN-γ RT-PCR products with nonradioactively labeled IFN cDNA probe. Lane 1 shows both 355-bp and 515-bp hybridized bands (corresponding to lane 6 of Figure 2). Lanes 2 and 3 were loaded with the ladder of misprimed RT-PCR products (lanes 5 and 4 of Figure 2) but only the 355-bp product hybridized.

polyacrylamide gel, when processed for modified silver staining ([2]), detected an extra 515 bp band (lanes 1,6,7,8,9; Fig. 2b). Interestingly, this extra band of 515 bp was detected in all four of the lepromatous leprosy cases. When subjected to hybridization, the IFN-γ cDNA probe hybridized strongly to both the original 355-bp as well as the extra 515-bp amplicons (Fig. 3) but to none of the numerous amplicons generated by design (lanes 4 and 5; Fig. 2) under low stringent conditions (annealing at 50°C) because of mispriming.

Our observation of an extra transcript of IFN-γ corresponding to 515-bp size detected as a rare, low copy number RNA molecule in lepromatous cases raises the possibility of the presence of an alternate population of IFN-γ. However, further extensive studies are required to be performed on a large number of patients to establish this distinct population of IFN-γ mRNA that may contribute toward the *M. leprae*-specific cellular anergy in the multibacillary leprosy patients.

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Independent Evaluation of Leprosy Elimination Activities in Bangladesh, 11–23 September 1997

TO THE EDITOR:

The World Health Organization (WHO-SEARO), in association with the combined Tuberculosis and Leprosy Control Services of the Ministry of Health and Family Welfare, organized an Evaluation of Leprosy Elimination Activities in Bangladesh 11–23 September 1997. The terms of reference were: a) to assess the progress toward achieving the goal of leprosy elimination in Bangladesh by 2000 A.D., nationally and

subnationally; b) to review the implementation of the National Leprosy Programme in specific activities such as case detection and the provision of multiple drug therapy (MDT), case holding and support activities such as information-education-communication and training; c) to review and to validate available data and d) to submit recommendations for further strengthening and accelerating elimination activities.

The evaluation was carried out by four teams, each consisting of three members and a project facilitator or representative from the Ministry, covering all 6 divisions of the country, 29 of the 64 districts (25%), 64 of the 460 "thanas" (primary health care complexes with inpatient facilities) and 10 of the 12 leprosy hospitals. This included the examination of 121 patients, review of 150 record cards, interviews with 76 leprosy staff and 156 general health staff, including 55 doctors and 159 community members. The team leaders (all from outside Bangladesh) were Drs. J. P. Baral (Leprosy Control Section, Ministry of Health, Nepal); N. S. Dharmshaktu (Leprosy Division, Ministry of Health and Family Welfare, Delhi, India); A. C. McDougall (Department of Dermatology, Oxford, U.K.) and B. Peters (DANLEP, Delhi, India).

Following a series of meetings with WHO and the Ministry of Health on return to Dhaka, observations and recommendations were pooled to produce a preliminary report for the Health Secretary, pending the later production of a full account of all the main findings. In the South-East Asia Region (SEARO) of WHO, Bangladesh is unusual (in fact, unique) in having a combined tuberculosis-leprosy program. This was created in 1976 by the government of Bangladesh as a separate Mycobacterial Disease Control (MBDC) unit under the Directorate of Health (Preventive) to oversee the National Tuberculosis and Leprosy Control Programme. In 1985, MDT was introduced in some endemic areas and, by 1990, 120 had been covered in collaboration with nongovernmental agencies which have, over a period of many years, played an important role in leprosy control, notably in the northern and more highly endemic parts of the country.

The present situation is that Bangladesh (population approximately 120 million) has 13,385 registered cases with 100% MDT coverage, a national prevalence rate of 1.1 per 10,000 of the population, a total of 70,063 cases cured with MDT, 11,225 cases detected in 1996, giving a detection rate of 9.4/100,000 of the population. WHO estimates 50,000 cases to be detected and cured, 25,000 of whom are to be found through the Leprosy Elimination Campaign (LEC) approach, already in operation and to be extended during the remainder of this year and in 1998. Efforts are now being directed to achieving elimination levels at subnational levels, notably in the division of Rajshahi (northwestern part of the country) which accounts for approximately 50% of all cases in the country.

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