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# News and Notes

#### Indian research doesn't reflect country's needs'

The following is taken from the British Medical Journal, 315, 2 August 97:

Most medical research in India is unrelated to the country's major health problems, says a new report which has sparked off a debate on the priorities and relevance of biomedical research.

The report, based on an analysis of research publications from India indexed in the Medline database says that achievements in research have 'little influence' on healthcare delivery. Medical research seems to be concentrated in the fields of tertiary health care and new biology, says the study published in *Current Science*, a journal of the Indian Academy of Sciences (1997;72:912–22).

Government statistics show that diarrhoea diseases, respiratory illnesses, and infections, including malaria and tuberculosis, are the leading causes of morbidity in India. But the highest number of research publications were in general medicine (2602), paediatrics (1420), pharmacology (1367), immunology (928), oncology (821), surgery (750), and cardiovascular research (663), according to the analysis of Indian research published between 1987 and 1994.

The analysis by Subbiah Arunachalam, an information scientist with the Swaminathan Research Foundation in Madras, also suggests that India is doing little research in opthalmology (362 papers published), although the country has the world's biggest blind population—10 million—and has a high incidence of cataract and glaucoma. He says that doctors in tertiary care centres are 'better endowed' to do research and publish findings than their overworked counterparts in less expensive public hospitals, which are overcrowded with patients.

The analysis also showed that more than 14,000 of the 19,952 papers published during the period were in journals with an impact factor of less than 1.0 while only 58 papers were published in journals with an impact factor higher than 8.0.

The report's conclusions as well as its methodology have, however, been criticised. A spokesman for the Indian council of medical research said that research with a direct impact on health care is not always published. Also the Medline database covers less than a quarter of the English language medical journals published in the country.

Critics also say that the government neglect of public health is responsible for the persistence of many of India's major health problems, and not researchers focusing on the wrong areas. Political and administrative action is needed to fight infections and nutrition related problems, said B Ramamurthy, a neurosurgeon in Madras.

Some analysts, however, say that the mismatch between India's healthcare needs and research carried out cannot be denied. MS Valiathan, a former director of a government funded medical sciences and technology centre, said: 'Successive waves of tools and methods from the West, not societies' needs, have determined the medical research agenda in the country.

# Gender and Leishmaniasis in Colombia: inequality in access to health services for women

This important report from WHO and the Special Programme for Research and Training in Tropical

Diseases (WHO/TDR/GTD/RP/97·1) draws attention to distortions in the epidemiological patterns of leishmaniasis in Colombia and inequalities in access to health services for women. The *Abstract* reads as follows:

Leishmaniasis in Colombia has traditionally been seen as a health risk for adult males, as they become infected when they enter the biotopes of the vector in order to utilize the natural resources. National health statistics seem to confirm this theory. During field studies, however, the PECET observed equal proportions of men and women with active leishmaniasis, and delayed skin testing also showed equal proportions of both sexes having had contact with the parasite from early childhood. Some factors, up until now never seriously analyzed in Colombia, seem to distort the epidemiological pattern of the disease in the country, and gender-linked differentials in access to health care appear to exist. As a consequence, human suffering is not alleviated, and the socio-economical repercussions for the household are significant. The preventive measures of the Ministry of Health (MOH) systematically underestimate the magnitude of intra- and peridomicialiary transmission, and active case detection is omitted for female patients. Further research should be devoted to this phenomenon. The MOH should be encouraged to improve programmes of leishmaniasis control, especially with regard to active case detection, training and teaching, so that the diagnosis can be made more rapidly. In the meanwhile, the MOH should retrain its health workers.

#### The Conclusions read:

In this study we have presented arguments to demonstrate that women and children are as much affected by cutaneous leishmaniasis as men in foci where transmission is domestic and peridomiciliary (an epidemiological situation observed increasingly in Colombia) but that women who are resident in these rural areas have less access to health care. It has been shown that the statistics of the MOH do not really reflect the true epidemiology of leishmaniasis in rural areas. Because women consult official services less than do men, women are under-represented in the incidence of the disease, and a false estimation of the number of cases by sex.

This problem is often ignored; a better strategy on the part of the MOH is needed to correct the inequalities in access to treatment for woman, as well as a strategy for control of the disease oriented towards domestic and peridomiciliary transmission. One would also want to help the MOH to see that the inequality in access to health services that exists for women with respect to leishmaniasis might also exist with regard to other problems and situations in rural health. This report seeks to sensitize health personnel to the possibility of diagnosing cutaneous leishmaniasis in women when they meet them, even if they come to the services for other reasons (e.g. with sick children for vaccination or pre- and post-natal care).

#### Genetic engineering reverses antibiotic resistance

The following appeared in the British Medical Journal, 315, 16 August 97:

Researchers have developed a genetic engineering technique that for the first time allows drug resistant bacteria to be rendered drug sensitive. This may prove to be a cheaper method of negating antibiotic resistance than the current approach of developing new drugs.

A team of biologists from Yale University in the United States, led by Nobel prize winner Professor Sidney Altman, has used plasmids that contain synthetic genes coding for small oligoribonucleotides, called external guide sequences (EGSs), to infiltrate drug resistant strains of *Escherichia coli* (*Proceedings of the National Academy of Science* 1997:94:8468–72).

Once inside, the external guide sequences facilitate the cleavage and inactivation of messenger RNA associated with the bacteria's drug resistant genes. In this way the bacteria are transformed from drug resistant to drug sensitive. In this study the bacteria were originally resistant to chloramphenicol and ampicillin, but the technique should be just as effective for bacteria resistant to other antibiotics.

Professor Altman said: 'This is a different approach to antibiotic resistance from the usual pharmaceutical company approach, It takes a shorter time and is less expensive. In a couple of months we can develop EGSs against particular genes.'

Furthermore, the researchers showed that increasing the external guide sequences to messenger RNA ratio and targeting more sites on the messenger RNA both resulted in a higher success rate in eliminating drug resistance.

Antibiotic resistance has become an increasing clinical problem in the past 15 years, leading to the use of more expensive antibiotics that often have more side effects. Notably the eradication of tuberculosis has been complicated by the rise in drug resistant strains of *Mycobacterium tuberculosis*. Antibiotic resistance is also a problem in the treatment of *Haemophilus influenza*, a common vector in childhood meningitis, epiglottitis, and pneumonia.

Professor Altman won the 1989 Nobel prize for his discovery that RNA, as well as being a carrier of genetic material, can be involved in chemical reactions. He has been working on the problem of bacterial drug resistance for the past six years.

Although the Yale team has shown the success of their techniques in laboratory cultures, it readily admits that it will be several years before a therapeutic tool is developed. The question now is whether the development of this technique will indeed prove cheaper and more practical than the present strategy of developing new antibiotics.

Professor Altman added: 'I want to emphasise that this is purely laboratory work at present and further research will be needed in animal models, and after that humans. We will continue to refine the technique but cannot afford to take the research further ourselves.'

# Human Development Report, Oxford University Press, UK, 1997

Rapid technological changes and globalisation are transforming the world economy at unprecedented pace, but the benefits are going to the rich and strong rather than the weak and poor, the United Nations says today.

Despite claims that free trade and free movement of capital would benefit all nations through a process of global 'trickle-down', the UN's latest Human Development Report found the gap between wealthy and poor growing ever larger.

The report says that free global markets have been applied selectively, with the West driving through reforms that help its exporters and financiers but being resistant to changes in agriculture and textiles that would benefit the developing world.

'Lacking power, poor countries and poor people too often find their interests neglected and undermined.' The share of world trade for the 48 least-developed nations—representing 10 per cent of the world's population—has halved to just 0.3 per cent in the past 20 years.

In measuring poverty, the report uses the broader criteria of 'human poverty', rather than just 'income poverty', taking into account the factors measured in the HDI index, such as illiteracy and short life expectancy which add up to lack of choices and capabilities, not just income. Canada has the highest HDI rating in the world, while Britain ranks 15th.

'Globalisation has its winners and its losers. With the expansion of trade and foreign investment, developing countries have seen the gaps among themselves widen. Meanwhile, in many industrial countries unemployment has soared to levels not seen since the 1930s, and income inequality to levels not recorded since the last century'.

Among the losers are the 1.3 billion people living on a dollar a day or less, the 160 million children moderately or severely malnourished, the one fifth of the world's population not expected to live beyond the age of 40, and the 100 million people in the West living below the poverty line.

The biggest globalisation winners have been multinational corporations. A list of the 100 largest economies in the world would show that half of them are nation states and the other half corporations. The 359 largest corporations now account for 40 per cent of global trade.

According to the UN, globalisation is being presented 'with an air of inevitability and overwhelming conviction. Not since the heyday of free trade in the 19th century has economic theory elicited such widespread certainty.'

The UN believes much of this optimism is misplaced, and that the rewards will not be available to all unless specific policies are identified.

The report puts forward a six-point programme for promoting pro-poor growth:

- People-centred policies to give individuals, households and communities better access to economic, social, political, environmental and personal assets.
- Work towards gender equality.
- A minimum target of 3 per cent per capita income growth in 100 poor countries.
- Improving the management of globalisation through better trade policies, fairer rules and fair terms for poor countries to enter markets.
- Creating a political environment so that poor people and poor communities can be heard rather than suppressed and oppressed.
- Special action to prevent countries sliding back into poverty, including peace-building efforts and debt relief.

Put into context, the UN puts the cost of eradicating poverty at 1 per cent of global income. Effective debt relief for the 20 poorest countries would be even cheaper with a price tag of \$5.5 billion—the cost of building Disneyland Paris.

# Why does HIV infection progress to AIDS?

The following appeared in the British Medical Journal, 315, 30 August 97:

The answer to this deceptively simple question has aroused controversy,<sup>1</sup> much of it clarified recently. From the beginning of the epidemic it was clear that progression to AIDS was marked by the development of opportunistic infections or tumours, associated with immunological failure and T4 cell lymphocyte depletion. Overwhelming epidemiological evidence showed that a retrovirus, HIV, capable of infecting and destroying T cells, was the causative agent. The initial doubts expressed about HIV being the cause of AIDS<sup>1</sup> because of the small numbers of T cells infected have been dispelled by a clearer understanding of the dynamics of infection which was generated by mathematical modelling of changes in viral load following proteinase inhibitor therapy.<sup>2</sup> More than 109 viral particles are produced each day, predominantly from recently infected T cells. Although the number of T cells destroyed by this process is controversial,<sup>3</sup> it is likely that this high rate of destruction cannot be compensated for by increased rates of production, and T4 cell numbers therefore decline. It also seems that specific immune responsiveness to particular antigens (measured by the V beta family repertoire) is depleted as the T4 cell numbers fall, leaving the patient open to a range of opportunistic infections.

The observe of the question posed is why HIV infection does not progress to AIDS in a small proportion of patients (5-10%). This may represent the extreme of normal biological variability, but some of these individuals have deletions in the viral genome rendering it non virulent and others have a relatively vigorous and, more importantly, broad spectrum cytotoxic lymphocyte response to the virus which may keep replication in check for long periods.

Brian Gazzard, consultant physician, London

# References

<sup>&</sup>lt;sup>1</sup> Duesberg PH. Is HIV the cause of Aids? Lancet, 1995; 346: 1371-2.

<sup>&</sup>lt;sup>2</sup> Ho DD, Newmann AV, Perelson AS, Chen W, Leonard JM, Markowitz M. Rapid turnover of plasma virions and CD4 lymphocytes in HIV-1 infection. *Nature*, 1995; **373**: 123-6.

<sup>3</sup> Effros RB, Allsopp R, Chui CP, Hausner MA, Hirji K, Wang L, et al. Shortened telomeres in the expanded CD28-CD8+ cell subset in HIV disease implicate implicative senescence in HIV pathogenesis. AIDS 1996; 10: F17–22.

#### **Tuberculosis infection process pinpointed**

The following appeared in the British Medical Journal, 315, 30 August 1997:

*Mycobacterium tuberculosis*, the bacterium that causes tuberculosis, uses an underhand trick to invade cells, researchers announced last week.

The body's immune system normally tags any invading bacteria with proteins that alert macrophages to consume it. One of these proteins, C2a, then floats in the blood with no known function.

The researchers from Washington University School of Medicine in St Louis showed that M *tuberculosis* manages to associate with this discarded C2a protein and use it to create a new label that helps the bacteria adhere to the macrophage and enter it. Once inside the macrophage, the mycobacteria multiply until the cell ruptures and the bacteria are then released to repeat the process (*Science* 1997;277:1091–3).

Previous studies have described other invasion techniques used by mycobacteria, but this strategy stands out because it is used only by the types of mycobacteria that cause disease. Jeffrey Schorey, one of the lead authors, said: 'Understanding how the bacterium invades cells may be an important first step towards developing a vaccine to prevent tuberculosis.'

Tuberculosis is a growing problem, with eight million new cases of pulmonary tuberculosis a year and three million deaths. As many as one third of the world's population is infected with M tuberculosis.

### Thalidomide ban to be lifted in the USA

The following appeared in the British Medical Journal, 315, 20 September 1997.

A scientific advisory committee to the Food and Drug Administration has recommended that thalidomide, which has never been licensed in the United States, should be allowed to be used to treat serious inflammatory conditions associated with leprosy.

Once approved, the drug could also be prescribed, under certain restrictions, to treat other diseases, including some forms of cancer, lupus, chronic host-graft disease, and some complications due to AIDS.

Thalidomide was used widely throughout Europe during the 1950s and 1960s as a sedative for pregnant women. But after about 8000 babies were born with severe deformities to mothers who had taken the drug its use was stopped. Thalidomide was never licensed in the United States, but it can be prescribed under certain circumstances, under a special dispensation that allows rare or controversial drugs to be used for 'compassionate' purposes in individual patients. Women who are given the drug, however, must agree to make all efforts possible to avoid getting pregnant; men must agree to wear condoms or abstain from sexual intercourse because it is unknown whether thalidomide can be found in semen.

The scientific committee was set up to review the drug after reports that buyers clubs in San Francisco were obtaining the drug illegally from Brazil to give to patients with AIDS. Celegene, an American pharmaceutical company that manufactures thalidomide, was asked to review the data on the drug and submit an application to the Food and Drug Administration.

The administration said that there was renewed interest in the drug because of its ability to lower the body's concentrations of tumour necrosis factor  $\alpha$ , a chemical mediator which increases in response to infections such as tuberculosis, sepsis, and cancer. There has also been interest in the fact that thalidomide stunts new blood vessel growth, which would make the drug useful in treating macular degeneration.

The Thalidomide Victims Association of Canada referred to the possibility of thalidomide's approval as 'extremely distressing'.

# **Reaching undetected leprosy patients in endemic countries Joint ILEP–WHO Workshop, 1997**

# 1 Introduction

The Workshop, held at WHO Headquarters, Geneva, Switzerland, 18–19 July 1997, opened with welcome addresses by Dr J-P. Schenkelaars, President of ILEP, the International Federation of Anti-Leprosy Associations and Dr S. K. Noordeen Director, WHO Action Programme for the Elimination of Leprosy. Both speakers stressed the importance of this occasion, the first joint workshop ever to be held between ILEP and WHO and also the first time there has been a global tripartite collaboration between national programme managers, ILEP Member Associations and the WHO Action Programme for the Elimination of Leprosy.

Dr Schenkelaars described ILEP Member's commitment to getting Multi drug Therapy to all those who need it. Members are currently supporting a number of projects which aim to bring treatment to hard to reach patients. However, there is always more that can be done. Much of the work of ILEP Members is carried out through support to national programmes and Members are keen to work with national programmes in the development and implementation of strategies to reach undetected patients. The discussions between national programme managers, technical experts and ILEP Members in this workshop should pave the way for action in the field.

Dr Noordeen stressed the very focused and practical nature of the workshop. From the perspective of WHO, reaching undetected patients in endemic countries is extremely important to attain the leprosy elimination goal to which all member countries of WHO are formally committed. The significance of case detection and treatment with MDT was emphasised. This is now a critical point in the global effort against leprosy and there is a need to intensify and adjust anti-leprosy activities in order to reach undetected leprosy patients.

Dr Noordeen recommended that any strategies which are adopted should have a nationwide coverage in order to bring about the maximum benefit.

#### 2 The current situation of undetected patients

Dr D. Daumerie of the WHO Leprosy Elimination Programme described the current situation regarding undetected patients. The global number of leprosy cases in 1997 is estimated by WHO to be around 1.15 million of which 890,000 are registered by health services. In many endemic countries, leprosy continues to be under detected. In 1997, an estimated 260,000–300,000 patients have no access to diagnosis and treatment. This number represents about one quarter of all existing cases and is unacceptably high.

Undetected cases are at risk of developing complications and are likely to transmit the disease. The majority of the undetected cases live in the 'major' leprosy endemic countries. India has more than 120,000 undetected cases, mainly living in Assam, Bihar and Orissa. It is estimated that 20,000 cases remain undetected in Bangladesh and Indonesia. Other endemic countries, notably Cambodia, the Democratic Republic of Congo, Guinea, Laos, Liberia, Madagascar and Nepal may have 2000–5000 cases each. Dr Daumerie explained that the widest gaps between the number of registered cases and the estimated number of cases are in countries where leprosy elimination programmes are non-existent. In highly endemic countries which have a well functioning national leprosy elimination programme, the absolute number of undetected patients is high even though the gap between registered and estimated cases is small. The need to improve the reliablity of estimating the number of leprosy cases was stressed.

#### 3 Why are patients undetected?

Dr W. C. S. Smith, Chair of the ILEP Medico-Social Commission, outlined some of the reasons why

patients remain undetected. In 1994, respondents to an ILEP questionnaire survey (covering programmes which totalled 250,000 registered patients) identified groups of people with leprosy who were not yet detected. The problems in reaching such people are either of a geographical nature, related to the community or related to the health services.

**Geographical problems** include difficult terrains (e.g. mountains, rivers, scattered islands, poor or non existent roads) or inclement climates (e.g. monsoons, heavy snowfalls).

**Community related problems** include insecurity (e.g. wars and famines), mobility (e.g. refugees, nomads, seasonal and migrant workers, pilgrims, military) beliefs (e.g. stigma, treatment refusers) women (e.g. culture, marriage, childbirth), economic (e.g. loss of wages, affluence) and special groups (e.g. tribal, minorities, language, elderly, urban slum dwellers).

**Health Services problems** include no leprosy programme, no healthcare infrastructure, no trained staff, traditional healers, restricted clinic time, lack of privacy, private health care).

Dr Smith reported that in many areas it was a combination of one or more factors which contributed to problems in reaching undetected leprosy patients.

# 4 An overview of ILEP Members assistance in reaching undetected patients

Dr S. Lacey, Scientific officer, ILEP, described the work which ILEP Members are doing to bring MDT to all who need it. ILEP Members are currently supporting leprosy work in more than 90 countries. Members work in partnership with National and Local Governments, Non-Governmental Organisations, both local and international, as well as communities. A survey by ILEP in 1994 highlighted the resources needed by individual projects to reach undetected patients. As a result of this information many of the leprosy treatment programmes sponsored by ILEP Members were strengthened.

More than 40 special initiatives aimed at reaching undetected cases are currently being supported by ILEP Members and their partners in 15 countries. Activities are being carried out in 7 of the top 16 leprosy endemic countries. Half of the initiatives are located in India. A variety of solutions have been adopted illustrating the flexibility of approach. So far the focus has been on strengthening the existing leprosy programme, integration of the leprosy programme within the general health services, improving access to treatment services or involving the community in order to sustain new initiatives. Examples of special initiatives were given from various countries amongst others, India, Brazil, Sudan, Angola, Somalia, the Philippines. In scope, the projects supported ranged from working with an international NGO to support rural general health dispensaries in Angola to an extensive package of activities including health education, telephone help lines, opening of new clinics and the use of mass media in a city in Brazil. Some ILEP Members are also supporting Leprosy Elimination Campaigns (LEC) and Special Action Projects for the Elimination of Leprosy (SAPEL) initiatives.

Dr Lacey emphasised that ILEP Members have adopted a comprehensive approach. Thus, disability prevention and the reintegration of people affected by leprosy back into society are seen as significant components of a quality service to leprosy patients. Since 1996, field programmes supported by ILEP Members have been requested to report on the WHO disability grade of new patients in an attempt to monitor more closely delay in detection so that action can be taken to improve the service to those who have not yet been detected and treated.

# 5 An overview of the technical and operational problems of reaching undetected cases

Dr M. Leide Wan-Del Rey de Oliveira the National Co-ordinator for Sanitary Dermatology in the Ministry of Health Brazil, drew attention to the problem of detecting cases of leprosy when patients present with early symptoms. The patient's low level of awareness of early symptoms can delay detection and the health professional may have a low sensitivity in diagnostic skills. However, she stressed that all cases with cardinal leprosy signs can be diagnosed using the current technology, the

challenge is to address both the geographical and social problems which increase the difficulty of reaching patients.

People living in remote rural areas with low population density may have no access to health services. When providing leprosy services, issues such as cost-benefit and quality of the service must be taken into account. In over crowded areas and socially impaired urban pockets, poverty, violence, homelessness, family breakdown and frequent absences from home demand flexibility of treatment points in time, place and in supervision of doses. The periphery of metropolitan areas may have a combination of rural and urban problems.

In Brazil, strategies for reaching undetected patients focus on the selection of areas with high hidden prevalence, then choosing from a range of interventions such as Leprosy Elimination Campaigns (LEC) to make an impact on public awareness, and Special Action Projects for the Elimination of Leprosy (SAPEL) to improve the commitment of community agents, and to sell or 'market' the elimination target to local authorities and partners. The importance of using all of the health infrastructure was stressed.

#### 6 Leprosy Elimination Campaigns (LEC)

In many areas where leprosy treatment services are available there is evidence that a number of patients remain undetected. Dr Myo Thet Htoon, Consultant WHO Action Programme for the Elimination of Leprosy, described how Leprosy Elimination Campaigns aim to detect these leprosy cases, particularly the 'cases of consequence' and to treat them with MDT. LEC is a combination of three elements namely: capacity building measures for local health workers to improve MDT services, increasing community participation to strengthen elimination activities at the periphery and diagnosing and curing patients. Activities carried out under LEC vary from country to country.

An example of the implementation of a LEC in Indonesia was described by Dr Y. Hasibuan Chief, Leprosy Control Division, Indonesia. Leprosy Elimination Campaigns (LECs) were carried out in Karawang, Bekasi and Subang districts in West Java Province from June–September 1996. The area covered had 39 health centres serving a population of 1.5 million people. 1142 new cases were detected in 285 villages during the four month period. This was a dramatic increase, more than 47 times the total number of new cases in a one year period before the LECs started. The success of the LECs was attributed to the involvement of health staff, community leaders and volunteers in preparatory and training workshops, adequate supervision of the fieldwork activities and inter sectoral cooperation between district, social, education, religious and medical departments. An increased community awareness of leprosy and the input of informal leaders also contributed to the successful outcome.

Districts with a prevalence rate of leprosy of more than three cases per 10,000 are now being targeted in a plan to extend LEC projects. The Government of Indonesia, ILEP Members and WHO have all been approached for assistance in extending LECs.

# 7 Special Action Projects for the Elimination of Leprosy (SAPEL)

Dr M. A. Khalafalla Director, National Leprosy Control Programme Sudan described the experience of SAPEL, a WHO initiative aimed at providing MDT services to patients living in special difficult to access areas or situations or to those belonging to neglected population groups. Most offered solutions to situations where there was geographical inaccessibility or insecurity. He stressed the need for WHO and international NGOs to be more pro-active in helping programme managers to develop SAPEL proposals.

Dr Khalafalla illustrated how SAPEL offered the possibility of reaching leprosy patients among nomadic populations by giving six months treatment in the form of blister packs to patients without supervision, provided that the patient receives full information about the treatment and the need for treatment regularity. In other difficult-to-access areas this was made possible by using the community leaders to deliver MDT treatment and trace defaulters themselves. It is therefore important to identify SAPEL areas in all endemic countries and provide MDT services to under-served populations living there.

Dr G. Cabanos of the WHO Action Programme for the Elimination of Leprosy informed the group that, so far, in the last six meetings of the SAPEL Steering Committee, 52 projects from 22 countries have been approved and are being implemented. Twelve (75%) of the top 16 endemic countries are doing special action projects while Mozambique, Ethiopia, Madagascar and Tanzania are still in the process of developing plans for these special initiatives.

The number of new cases so far detected, based on interim and final reports, is 3396 with almost equal proportions between PB (1698 or 50%) and MB (1658 or 48.8%) cases and a small proportion of unknown cases (40 or 1.2%) cases. The projects are expected to detect about 14,000 new cases.

SAPEL projects may not contribute significantly to the elimination of leprosy as a public health problem in terms of decreasing the prevalence rate to elimination levels; however, since our battle cry is to 'reach every patient in every village', our efforts and resources must also be geared towards providing equity in health care to cover 'special' groups of people or populations. These are the under-served, unreached leprosy patients which SAPEL, as a special initiative, must cater to. A set of parameters to evaluate these projects is necessary and the Leprosy Elimination Monitoring (LEM) exercise is a good opportunity to do this.

#### 8 Reaching the undetected and ensuring sustainability

Advice from the ILEP Medico-Social Commission was presented by Dr E. Declercq Medical Advisor to Damien Foundation Belgium and a member of the Commission. He stressed the need for all leprosy control programme managers to investigate whether they have undetected cases within their area and if so, to find out the reasons for this. Possible solutions for reaching undetected patients were described.

Dr Declercq presented a number of criteria for the critical assessment of proposals to reach undetected patients. The ILEP Medico-Social Commission had recommended that consideration should be given to the following: Is there a clear and adequate plan of action? Is the proposed solution feasible? Is it acceptable to the population? Were potential or actual partners (e.g. community members, local associations) involved in the preparation of the plan? Is it cost-effective? How will the results be evaluated? Can the project be expanded to other areas? Is it technically and financially sustainable?

Dr Declercq emphasised that many hard to reach leprosy patients could and should be adequately taken care of by the existing health services. Improving the effectiveness of these services regarding the management of leprosy patients, and their acceptability for the community should remain the first priority of leprosy control managers. Some special situations need innovative action but their feasibility, chances of success, cost-effectiveness and potential impact on the routine programme should be analysed. There should always be a medium to long term plan to integrate these actions into the routine control programme.

#### 9 Development of workshop recommendations

Professor M. F. Lechat and Dr W. C. S. Smith, joint Chairs of the Workshop identified a number of issues for discussion. The participants of the workshop were divided into four working groups representing four different endemic zones of the world. Within the groups, each national programme manager reported on:

- the current leprosy situation in the country
- difficult areas within their country
- ongoing activities to reach undetected patients
- national plans to reach undetected patients
- collaborative activities in reaching undetected patients.

The reports from each group were discussed during a plenary session and the following Workshop Recommendations were agreed:-

# RECOMMENDATIONS

- 1 In the effort to reach undetected cases, the primary health care system should be strengthened by:
  - training all health care staff in diagnosis, treatment and care of patients (capacity building measures for local health workers to improve MDT services);
  - involving other non-leprosy NGOs, local leaders, volunteers and their communities.
- 2 Initiatives and special campaigns like Leprosy Elimination Campaigns (LEC), Special Action Projects for Eliminating Leprosy (SAPEL), etc. should be implemented within the national leprosy programme, particularly in difficult areas:

Particular emphasis should be given to sustainability on the completion of special actions:

- all potential partners, technical and financial, should be involved starting from the early planning stages;
- special projects need not all be directed to WHO for funding but information regarding these
  activities should be reported to all concerned parties.
- 3 Encourage the wider use of leprosy elimination monitoring (LEM) to measure access to MDT and success of the programme using indicators of:
  - drugs supply
  - patient care
  - leprosy elimination
- 4 Organize national leprosy campaigns involving, on a larger scale, local NGOs, media and politicians, well-known figures, as well as people affected by the disease to demonstrate that they can lead a normal life.
- 5 Improve information systems to identify areas needing attention, for example through the use of Geographic Information Systems (GIS).
- 7 The coordination of activities is essential. A regular meeting at the initiative of Governments with local and international agencies should be held at least annually.
- 7 In promoting collaboration and monitoring progress towards reaching undetected patients, a joint Workshop between ILEP, WHO and the National Programme Managers should be held once a year.

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# Further reading:

Leprosy Elimination Campaigns (LEC) and Special Action Projects for the Elimination of Leprosy (SAPEL). Questions and Answers. World Health Organisation Action Programme for the Elimination of Leprosy, WHO, Geneva, 1997.

Detecting and treating hard to reach leprosy patients. ILEP Medical Bulletin no. 11. ILEP, London 1997.

# Independent evaluation of leprosy elimination activities in Bangladesh 11–23 September 1997

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 during the above dates. The terms of reference were: a, to assess the progress towards achieving the goal of leprosy elimination in Bangladesh by 2000 AD 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 validate available data; and d, to submit recommendations for further strengthening and accelerating elimination activities.

The evaluation was carried out by 4 teams, each consisting of 3 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 in-patient 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, UK) 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 programme. 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 non-government 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% 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 estimate 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 (north-western part of the country), which accounts for approximately 50% of all cases in the country.

# **Report of the workshop on 'Strategies for Elimination of Leprosy from Maharashtra'**

The Workshop on 'Strategies for Elimination of Leprosy from Maharashtra' was held on 29 and 30 August 1997 in the premises of B. J. Medical College, Pune. The objectives of the workshop were to identify issues related to Elimination of Leprosy from Maharashtra as a preparatory phase of the forthcoming Modified Leprosy Elimination Campaign (MLEC) aiming at creating public awareness and identification of hidden leprosy cases as well as to develop academic interest among the District Leprosy Officers (DLOs) of Maharashtra State.

The workshop was organized by the Indian Association of Leprologists, Maharashtra Branch (IAL-MB) in collaboration with the Govt. of Maharashtra and Bombay Leprosy Project (BLP). The workshop was inaugurated on 29 August 1997 by Dr B. M. Dama, Addl. Director for Family Welfare, Govt. of Maharashtra. Shri Arun Ghate, Deputy Secretary, Public Health department, Govt. of Maharashtra expressed all his support towards MLEC and elimination of leprosy from Maharashtra. Dr C. V. Bapat,

Vice President of the Branch and Dr R. Ganapati, Former President of IAL and Director of BLP blessed the occasion. Dr C. R. Revankar, Hon. Secretary, IAL-MB welcomed the guests.

The Valedictory function was held on the following day. The Honorable Health Minister Dr Daulatrao Aher inaugerated the MLEC project as well as released publications of the IAL and Govt. of Maharashtra, Dr S. R. Salunke, Director of Health Services, Govt. of Maharashtra was Chief guest. On this occasion, Government of Maharashtra and IAL-MB honoured Dr R. Ganapati and Dr A. R. K. Pillai, President, Indian Leprosy Foundation for their yeoman services to the leprosy programme in the state of Maharashtra.

The 'Action plan on Modified LEC' was presented by Dr S. B. Chavan, Jt Director of Health Services (Leprosy), Govt. of Maharashtra. This plan was discussed among the delegates who also gave many valuable suggestions which was accepted.

A total of 10 papers were presented on both days. Seven papers were presented by DLOs based on their experiences with MDT programme in their respective districts. The topics discussed mainly were—Leprosy problem in hilly terrain, urban areas, tribal communities, treatment out come and identification of smear positive cases, epidemiological trend in MDT districts, community participation etc.

Out of the seven papers, one paper titled 'Identification of smear positive leprosy cases' presented by Dr B. B. Mynde, DLO of Parbhani district, was awarded 'Dr A. C. Parikh award for the best presentation.'

The following issues were stressed after extensive discussion:

Planing case detection in geographically difficult areas and difficult population groups like hilly terrain, construction workers, nomadic groups and fishing folks was considered as a priority. It was also suggested to introduce short course chemotherapy with newer drugs.

Special plan for fishing population who are available only during certain period of the year was suggested. Maharashtra has 18 lakhs fishing population. This population may not be available during MLEC operation.

There should not be any doubts about WHO/Govt. of India recommendations on FDT-24 dose treatment. The treatment has been further reduced to 12 months in MB leprosy and single dose-ROM treatment in single patch PB leprosy. This has been recommended by WHO and Govt. of India. This should be accepted as a public health programme strategy.

The principles of current chemotherapy should be understood by all the public health clinicians and programme managers specially by those in charge of training centres. A workshop has been suggested for training centre trainers to discuss further on certain issues raised by the doctors on FDT.

Apprehension regarding practising dermatologists not following WHO/Govt. of India recommendations while treating leprosy patients should be viewed from an over all context of leprosy elimination. As a small proportion of patients are managed by them, attempts should be made to orient them to see that at least the minimum period of treatment as recommended by NLEP is followed by them.

It was announced that IAL-MB will conduct orientation programmes for dermatologists in various districts of Maharashtra in due course of time.

# 'Princess Diana Fund to raise millions?

The following is extracted from the Guardian:

Charities are calling for broad distribution of the tens of millions of pounds expected to be contributed to a central fund set up yesterday in memory of the Princess of Wales.

Experts predicted that volume of donations would be such as to require professional management of the fund. One suggestion is that it should be taken under the wing of a charity, such as the Red Cross, used to handling emergency appeals.

The Charity Commission last night confirmed that it was working with legal advisors to Kensington Palace on how to secure charitable status for the fund.

The fund, named The Diana, Princess of Wales Memorial Fund, was announced by Buckingham Palace in response to overwhelming public demand for a single conduit for donations to causes with which the princess was identified.

There was an immediate expectation that contributions would be routed to the six charities with which she retained formal links, as patron or president, after last year severing of connections with more than 100 others in an attempt to reduce her public commitments.

However, charity leaders urged a far wider spread of cash. They said this would reflect the princess's wishes and avoid very large sums going only to causes already well supported by the public, such as Great Ormond Street children's hospital in London.

Stephen Lee, director of the Institute of Charity Fundraising Managers, said: 'It needs to be empathetic, sensitive and above all flexible to reflect the breadth of the princess's interests and to accommodate monies that will be given for specific causes.'

The fund looks certain to attract sums at least comparable with the biggest one-off charitable causes, such as Live Aid which raised £40 million for famine relief.

One option would be simply to disburse the cash to make a quick and concrete impact. The 6 charities referred to above are:

- National Aids Trust: Promotes understanding of Aids and helps prevent spread of HIV (annual income £700,000)
- Centrepoint: Works with homeless young people in London (£6 million)
- The Leprosy Mission: Helps sufferers of leprosy and works towards its eradication (£7 million)
- English National Ballet: Furthers knowledge of enjoyment of classical ballet (£8 million)
- Royal Marsden Hospital: Cares for cancer sufferers (appeal fund £2 million; total income £61 million)
- Great Ormond Street Hospital: Cares for sick children (appeal fund £10 million; total income £89 million)

# 'Leprosy of consequence'

This term has recently appeared in the literature, particularly in the context of *Leprosy Elimination* Campaigns (LEC) as described by the Action Programme for the Elimination of Leprosy (see, for instance, Status Report Updated 1997. WHO/LEP/97.4).Leprosy cases of consequences are skin-smear positive cases and those with more than five skin lesions.

# Major breakthrough in leprosy using single-dose treatment inaugurated— Treatment span slashed to half for multibacillary cases

Single-lesion leprosy cases can be treated with a single-dose combination of rifampicin, ofloxacin and minocycline (ROM) and multibacillary cases need only 12 months treatment instead of 24 months, observed Dr R. Ganapati in Mumbai on Wednesday. These treatment schedules, approved by the World Health Organisation (WHO) and the Govt. of India, is a revolutionary breakthrough in reducing the treatment cost drastically and saving manpower resources in a significant way, he added. Nearly 60% of leprosy cases in India are single-lesion cases and the new scheme will be a boon to the leprosy programme in India, Dr Ganapati remarked.

Dr R. Ganapati, Director, Bombay Leprosy Project (BLP) who had also participated in the 7<sup>th</sup> Expert Committee meeting of WHO's held recently at Geneva informed that these schedules with newer drugs could be used where there are operational difficulties in treating leprosy patients. While presiding over a workshop on 'Future Strategies for elimination of leprosy in Mumbai' and launching of single dose chemotherapy for single lesion leprosy organised by the Jt Director of Health Services (Leprosy), Govt. of Maharashtra, Dr Ganapati said that already there is an indication for further reducing the duration of treatment for multibacillary leprosy cases also. The assistant Director of Health Services (Leprosy) of Mumbai and Thane, Medical Officers and staff involved in leprosy work in Mumbai attended the Workshop on "FUTURE STRATEGIES FOR ELIMINATION OF LEPROSY IN MUMBAI AND LAUNCHING OF ONE DOSE CHEMOTHERAPY FOR SINGLE LESION LEPROSY" held on 27.8.1997 at Committee Room, Advanced Training Institute, ATI Campus, Sion-Chunabhatti, Mumbai-400 022.

Dr Ganapati added that the new scheme will be an advantage to the leprosy programme and will drastically reduce the cost as well as manpower needs. The case load will come down with this short duration treatment and greatly help in reaching the goal of elimination of leprosy by the turn of the century.

Dr M. G. Singh, Assistant Director of Health Services (Leprosy), Mumbai organised the Workshop and explained the plan of implementation to medical officers and paramedical staff of Mumbai district. Dr A.R.K. Pillai, president of Indian Leprosy Foundation and Chief Guest inaugurated the function and exhorted all those involved in leprosy work to fully dedicate themselves in achieving the target. The single dose treatment was inaugurated by administering the new drugs to a child patient with a single lesion.

Dr C. R. Revankar, Deputy Director, BLP, explained the details on operational aspects of the short term chemotherapy. Dr V. V. Pai, Deputy Director, BLP, made an audio visual presentation on clinical trials on single dose chemotherapy for single lesion leprosy cases. Dr S. V. Dinni, Assistant Director of Health Services (Leprosy), Thane District, dealt with the advantages of the new scheme. Earlier Dr M. G. Singh thanked Dr S. B. Chavan, Joint Director Health Services (Leprosy), Govt. of Maharashtra for organising this workshop and welcomed the gathering. Dr S. B. Gude, Medical Officer, proposed a vote of thanks.

# Handbook of leprosy, Fifth, Revised Edition, W. H. Jopling and A. C. McDougall, 1996

CBS took over the printing and distribution of this Handbook in 1995 from Heinemann Professional Publishing in the United Kingdom. A reprinting of the Fourth Edition by CBS achieved widespread distribution, mainly in India, and in 1996 a revised Fifth Edition sold over 1000 copies in a little over one year.

The Fifth Edition has now been reprinted (April 1997) and is available from medical booksellers in India and from the address above.

*Erratum.* The inclusion of primary amyloidosis of peripheral nerves as one of the conditions causing palpable nerve thickening, with or without muscle wasting, page 152 in Chapter 12, *Differential Diagnosis*, is an error. The clinical features described for primary amyloidosis are correct, but this condition *does not cause palpable thickening of peripheral nerves*. This will be corrected in any future edition.

Available from: CBS Publishers & Distributors, 4596/1-A, 11-Daryaganj, New Delhi 110002, India. Tel: 91 11 3271632; fax: 91 11 3276712. Price: Rs 195.

# **Poster notice**

The poster included with this issue of the Journal is 'Staining slit-skin smears'.