

Teaching Materials and Services

AIDS and tuberculosis

The following item by John Maurice is reproduced by permission of *The Guardian* (UK) where it was published in February 1990.

'Anxiety is growing among World Health Organization experts and other scientists about the potential for the Aids virus (HIV) to react with tropical infections in Africa and other Third World areas. The consequences, they say, could be "catastrophic".

The World Bank, for example, has just announced that it will provide \$335,000 to WHO's Global Aids and Tropical Diseases Research programmes to support "high quality" research on HIV-tropical disease interactions. In an article soon to appear in the British journal *Aids*, epidemiologist Richard Morrow of WHO's Geneva-based Tropical Disease Research Programme, and Robert Colebunders of the Institute of Tropical Medicine in Antwerp, Belgium, say the interaction of HIV with tropical disease-producing microbes could be "disastrous". Two British scientists, Diana Lockwood and Jonathan Weber of the London School of Hygiene and Tropical Medicine have also drawn attention to tropical parasite infections in Aids patients.

Morrow and Colebunder describe four possible tropical disease-HIV interactions. (1) An HIV infection, by lowering immunity to invading organisms, could make a person more vulnerable to a tropical disease. (2) A person infected with a tropical parasite could be more vulnerable to HIV infection and could possibly spread the Aids virus more easily. (3) HIV could upset the uneasy "peace" between parasite and human "host" and by tipping the balance against the host allow a dormant or latent tropical infection to become a full-blown disease or a hitherto mild disease to attain life-threatening proportions. (4) Conversely, a tropical parasite attacking a person with dormant or latent HIV infection could trigger HIV-infected cells into viral activity and so hasten the onset of full-blown Aids.

Diagnosis of tropical diseases could also be affected by HIV. Many tests of tropical infection are based on detection of an immune response to the parasite. As HIV inhibits the immune system, such tests could give "false" negative results on a person infected with a tropical parasite. Treatment of tropical diseases could also be affected by HIV infection. In a person with an HIV-depressed immune system, drugs may not work as effectively as they were designed to do and might allow drug-resistant parasite strains to emerge.

One reason why there is so little documented evidence of interaction could be that tropical diseases are mainly rural whereas HIV infection is mainly urban. HIV, however, is beginning to spread outside the cities and cities are attracting more and more people from rural areas thereby increasing the risk of an explosive encounter.

Morrow gives a second reason: not enough researchers are actually looking for an HIV-tropical disease interaction. The few studies that have been done, he said in an interview, have not had strictly designed protocols. "They have not taken sufficient care, for example, in making sure control subjects were really not infected with a tropical disease or HIV." He believes reports of interactions will increase. "HIV may lead to a significant jump in the number of cases of tropical diseases generally. We should begin to prepare for this new situation, before it gets out of hand."

The growing anxiety about an HIV-tropical disease interaction is based more on knowledge of how the respective causative agents do their damage and how they spread rather than actual evidence of an interaction. HIV homes onto any cells carrying the "CD4" molecule. Helper T-

lymphocytes, the white blood cells responsible for orchestrating the immune response, all have CD4 molecules on them. About 20 per cent of macrophages, the immune cells that “present” an infecting agent to the T-helper cells and ultimately destroy it, are also CD4 positive. As are five per cent of B lymphocytes, the antibody producing white blood cells.

Any infection, therefore, tropical or otherwise, involving CD-bearing immune cells could theoretically clash with HIV. The parasites that cause malaria, for example, elicit an immune response involving B-lymphocytes, T-lymphocytes and macrophages. Macrophages are home to the organisms causing tuberculosis, leprosy, leishmaniasis (a disease that can cause leprosy-like tissue changes), Chagas disease and sleeping sickness (which also elicits a strong B-lymphocytes antibody response). Worms, such as those responsible for lymphatic filariasis (elephantiasis), onchocerciasis (river blindness) and schistosomiasis (or biharziasis) generally provoke a B-lymphocyte antibody response. So these tropical diseases are the first to watch for any HIV interaction.’

Reagents available for leprosy research

The Immunology of Leprosy Steering Committee (IMMLEP) has established several reagent banks for the purpose of supplying various biological materials free of charge to interested, qualified investigators for research related to the immunological aspects of leprosy.

The IMMLEP *M. leprae* tissue bank (National Institute for Medical Research, London) supplies killed *M. leprae*, soluble *M. leprae* preparations and phenolic glycolipid-I (PGL-I; native and synthetic forms). The IMMLEP Monoclonal Antibody Bank (Centers for Disease Control, Atlanta, Georgia, USA) supplies various *M. leprae*-specific monoclonal antibodies for research. The IMMLEP Recombinant DNA Bank (Whitehead Institute for Biomedical Research, Cambridge, Massachusetts, USA) makes available various rDNA clones, libraries, sequences, and vaccinia virus-*M. leprae* gene constructs to qualified investigators. And finally, the IMMLEP Recombinant Protein/Peptide Bank (National Institute of Public Health, Bilthoven, Netherlands) can supply a limited number of mycobacteria-derived recombinant proteins in milligram amounts for further characterization of their immunological and biological properties.

Interested investigators should send their inquiries and/or requests for any of the above-mentioned reagents, together with a brief one-half to one page summary of experiments to be conducted with the requested reagents to: Dr H D Engers, Secretary, IMMLEP, World Health Organization, 1211 Geneva 27, Switzerland.

In addition to the above-mentioned reagents, limited quantities of armadillo-derived Lepromin (Lepromin A; produced at the Gillis W Long Hansen’s Disease Center, Carville, Louisiana, USA) can be obtained by writing to: Dr S K Noordeen, Chief Leprosy Unit, World Health Organization, 1211 Geneva 27, Switzerland.

(Source: *TDR News*, No. 30, December 1989.)

Tropical Health and Education Trust

Dr Roger Harman, President of the British Association of Dermatologists, has supplied the following extracted information on the Tropical Health and Education Trust, recently formed in the UK. The trustees are Professor Eldryd H O Parry OBE MD FRCP (Chairman), Professor Keith P W J McAdam FRCP, Professor David A Warrell DM FRCP, Helen M Parry MA and Richard C Southwell QC.

The Aims of the Trust

The aims of the Trust are to get low cost text books to students, to promote their work in the community, and to develop links in teaching and research between British Medical Schools and African Universities.

Background

The idea for this Charitable Trust grew out of our experience of the plight of students in African Universities and the policies of the Overseas Development Administration in concentrating the dwindling resources for overseas aid for health largely on primary health care.

Quite simply, tropical African Medical Schools have so little foreign exchange that libraries lack books and journals, and students can not get their own books. Governments are cutting back severely on the funding of Universities. Restructuring of African economies will inevitably lead to students having to pay fees for tuition and accommodation which will hit the poor very hard indeed.

Work in the community by students, which is complex and costly, and is essential if they are to learn about the needs of the rural poor, is underfunded because Medical Schools are hard hit by lack of government funding.

Long standing links in medical research and training between Britain and Africa, potentially of great importance to both sides, are being weakened by policies in London.

Target Countries

We shall work at first with Ethiopia, Ghana, Tanzania and Zambia but we plan to include other countries in Africa as soon as our systems are tested and efficient.

Methods of Work

We shall buy books in bulk from a core list of 20: nearly all have the British Council subsidized imprint. We have negotiated discounted prices with publishers. The assembly and shipping of books will be done by the Ranfurly Library Service.

The Deans of the recipient Medical Schools, whom the Trustees know personally, are most enthusiastic. They have agreed to handle the books and to get them to senior students. The students will thus be equipped for their final examinations and, more importantly, for their subsequent 2 or 3 compulsory years of rural service. Poor students identified by the Dean will pay nothing: those who are better able to afford books will pay towards their costs. Any money received from students will be used to give students wider opportunity in community health and field research. When our funds allow, we shall get key journals to libraries. Later we hope to develop collaborative field and clinical research. This is seriously lacking but offers rich opportunities for identifying and solving major health problems, for developing the skills of younger African doctors and for maintaining continuing links with British academic medicine. Most support for the Third World at present is directed not towards long-term development but towards short-term help in emergencies and disasters. The Tropical Health and Education Trust is directing its urgently needed work to long-term goals, in supporting the training of those who will be responsible, in the years ahead, for health services in the poorer countries of the tropics.

Further information is available from: Secretary, Tropical Health and Education Trust, 24 Stephenson Way, London NW1 2BQ.

Technical Guide for Smear Examination, Portuguese edition

The second revised edition of a *Technical Guide for Smear Examination for Leprosy*, 1987 is now available in Portuguese from CERPHA, (Comisao Evangelica de Reabilitacao de Pacientes de Hanseniose), Rua Guanpeni 54/101—CEP 20.520, Caixa Postal 24046, Rio de Janeiro, Brasil. A description of the publication's contents was published in *Lepr Rev*, 1989; **60**: 333.

Implementing Multiple Drug Therapy for Leprosy, Bengali edition

This booklet, published by OXFAM, 274 Banbury Road, Oxford OX2 7DZ, England, was translated into Bengali by Dr and Mrs D S Chaudhury of the Greater Calcutta Leprosy Treatment and Health Education Scheme, 35/1/A Old Ballygunge 1st Lane, Calcutta, 700 019, India. The first printing was widely distributed in India and Bangladesh. A further 1000 are now being printed with assistance from OXFAM in Calcutta.

Centre for Medical Education, Dundee, Scotland—Newsletter

The format of the *Newsletter* for the Centre for Medical Education has recently been revised and will now highlight the activities of the Centre and may be of interest to local medical teachers and staff outside Dundee and overseas. The areas covered by this newsletter will include regular updates on the current research projects within the Centre and provide information on the services we have on offer and the expertise of the staff of the Centre. It will also give details of the courses and other staff development activities which are run regularly by the Centre and information on what is currently available in our medical education library. The Centre newsletter will be published in February, May and November each year.

The newsletter is available from Ninewells Hospital and Medical School, Dundee DD1 9SY, Scotland, UK.

Directory of International Grants and Fellowships

The Fogarty International Center of the US National Institutes of Health has compiled a 74-page directory of sources of grants and fellowships in the health sciences. Its purpose is to help biomedical and behavioural scientists identify fellowships for training outside their home countries and locate grants for research projects in their home countries. Published in April 1989, it contains information as of August 1988 on eligibility requirements, financial provisions, and application deadlines set by over 180 organizations and agencies worldwide. The directory is available free of charge. To order, send a self-addressed label to: Public Affairs Office, Fogarty International Center, Building 16, Room 306, National Institutes of Health, Bethesda, MD 20892, USA.

Health Technology Directions: issue on leprosy

Health Technology Directions, 1989; **9**: No. 3, is devoted entirely to leprosy. Following a general introduction, it reviews current approaches to diagnosis; treatment; prevention; programme management; national programme strategies. Technical advice on content was provided by P Feenstra (Amsterdam), R Jacobson (USA), A C McDougall (UK), S K Noordeen (Geneva), W F Ross (USA) and T Ramasoota (Thailand). There is a short but valuable list of materials available for further information and reading. Published by PATH, 4 Nickerson Street, Seattle, WA 98109-1699, USA. Single copies are free to health programme managers in developing countries and others interested in health care programmes.

TALC, England; books for community health workers

TALC (Teaching Aids at Low Cost) now have a colour poster, which shows both the front cover and price of all low-cost books handled by TALC. Fifty-six books are illustrated and the range is comprehensive and probably every one of them should be on the shelves of every developing country library, including the district hospital level.

Apply: TALC, PO Box 49, St Albans, Hertfordshire AL1 4AX, England. FAX: (0727). 46852.

Leprosy in childhood; TALC, London

This set of colour transparencies and written text has been fully revised and brought up to date (1989) and now includes a section describing the regimens of multiple drug therapy recommended for all cases by the World Health Organization in 1982. It is intended as a general introduction to leprosy, with particular reference to the disease as it occurs in children. It is suitable for all health workers in areas where leprosy is endemic and who may have to care for patients with leprosy, including non-specialized doctors, medical students, nurses, physiotherapists, clinical officers, auxiliary health workers and health educationists. The set of 24 slides covers: definition, prevalence, clinical types of leprosy, transmission, natural history of the disease, nerve damage, classification, foot ulcers, differential diagnosis, reactions, prevention and multiple drug therapy.

Cost of transparencies for self-mounting, with text: £3.50 (£2.75 to developing countries); cost of mounted slides in plastic folder, with text: £4.90 (£4.40 to developing countries).

Apply: TALC, PO Box 49, St Albans, Hertfordshire AL1 4AX, England.

Reconstructive surgery: leprosy (hand), Poona, India—best film award

At the 36th National Film Festival (1989) held in New Delhi 'Reconstructive surgery: leprosy (hand)' was chosen as the Best Scientific Film (including the environment and ecology). Produced by Dr Jal Mehta, Department of Surgery, Dr Bandorawalla Hospital, the film shows two reconstructive surgery operations. One, lumbrical replacement under measured tension is an innovation devised in the Department by Dr P V Joshi (surgeon) and Mr Walter Jennings (physiotherapist). The production team also included Dr Sanjay Sane, Mr Vivek Kulkarni (medical team), Anil Revankar, Bharat Nerkar and S Phansalkar (technical team). Further details are available from Dr Jan Mehta, Honorary President, Poona District Leprosy Committee, 35 Manisha, 2-A Moledina Road, Pune 411 001, India.

99 Ideas for volunteers in leprosy awareness work, GMLF

Shri G Ranga Rao, Director, The Bharat Scouts and Guides, 16 Mahatma Gandhi Marg, 1.p. Estate, New Delhi 110002, India, has produced a small booklet listing 99 ways in which young people can help improve awareness about leprosy in their communities, in a practical manner. The idea arose out of discussions and exchanges of views at the International Youth Workshop on Leprosy and Health, held in Germany, May 1989, organized by the Leprosy Relief Organization, Munich. A report of this meeting was published in *Lepr Rev*, 1989; **60**, 255.

Management courses for people working in voluntary organizations

The Open University, 1 Cofferridge Close, Stony Stratford, Milton Keynes MK11, 1BY, England.

The Open University's School of Management is one of the largest providers of management education in the country. It is now planning a series of courses designed specifically to meet the needs of people working in the voluntary sector—for example, charities and community projects, housing associations, or independent agencies working in cultural, welfare, environmental, religious, health or other fields. It will be possible to take these courses separately, or as modules building towards the Open University Professional Diploma in Management.

The courses are designed for:

- People who have management responsibilities in the voluntary sector but who have received little or no formal training or those who have trained but wish to update their knowledge and skills.

They will also be useful for:

- Professionals or specialists from other fields who have recently acquired management responsibilities.
- Newly appointed managers who need to acquire knowledge and skills quickly.
- Staff who are seconded from the private sector to work in voluntary organizations.

The unquiet eye; a diagnostic guide

Produced by Glaxo Laboratories Ltd, Greenford, Middlesex UB6 0HE, England and written by A J Bron, Reader in Ophthalmology, The University of Oxford and Honorary Consultant, Oxford Eye Hospital. This Booklet has 98 pages with 83 excellent colour plates.

The main headings include: a guide to techniques, interpretation of symptoms and signs, dry eye, ocular trauma, subconjunctival haemorrhage, conjunctivitis, keratitis, anterior uveitis, angle-closure glaucoma, episcleritis and scleritis, the red eye with proptosis, the red lid, summary of treatment, ocular screening by the general practitioner, anatomy and useful diagnostic equipment. There is also a full glossary.

Although written to some extent with UK general practitioners in mind, this publication, which can be obtained without charge from the above Glaxo address, deserves wider circulation and could be of considerable value to those working with leprosy patients in developing countries.

The Leprosy Mission (Southern Africa)—history

The Reverend L Wiseman has sent details on the history of the The Leprosy Mission (Southern Africa) which are as follows:

- 1874 Dr Hansen identifies the leprosy bacillus.
- 1874 The Mission is founded by Wellesley Bailey.
- 1949 The Leprosy Mission commences in Southern Africa.
- 1976 Multi Drug Therapy introduced and offers healing to leprosy patients.*
- 1976 In conjunction with TLM International, a Leprosy Control Programme is initiated in Lesotho.
- 1981 TLM Southern Africa starts its own field work. Leprosy Control Programmes commenced in Swaziland and Transkei. Rehabilitation programme is based at Westfort.
- 1984 New Life Centre in Transkei is opened.
- 1985 Kwa Zulu project commences.
- 1987 Ciskei project commences.
- 1988 Project RSA commences in Transvaal and Orange Free State.
- 1989 Projects commence in Kangwane, Lebowa, Kwa Ndebele, Qwa Qwa, Bophutatswana and in the refugee camps in Gazankulu.

*Case detection, multidrug therapy and management are proceeding extremely well on an outpatient basis. For details of the locally produced blister-calendar pack for MDT see *Lepr Rev* (1987), **58**, 85-87, Letter to the Editor by L Wiseman.

Voluntary Service Overseas

The explanatory brochure of the Voluntary Service Overseas organization begins:

‘VSO is a registered charity dedicated to assisting less developed countries. More specifically, we are a recruitment agency which finds, selects and places volunteers in answer to Third World requests. This work makes us distinctive among other charities and organizations in the UK. We send people, not money, so that our services are, in effect, entirely complementary to the efforts being made by agencies like Oxfam, Christian Aid and Save the Children Fund with whom we often work directly. VSO tries to respond to requests from overseas that include a strong training element. Our bias is firmly towards the poorest members of the community and we take great care to avoid undermining job opportunities for local people. Both staff and volunteers also pay special attention to women’s role in development projects. This is because women’s roles in child-rearing, in education and community cohesion underpin any healthy process of change.

Over the past 30 years, more than 30,000 volunteers have worked abroad with VSO. There are now over 1000 volunteers working in 40 of the less developed countries in Africa, Asia, the Pacific and the Caribbean. The application of each volunteer is carefully considered in order to select and interview candidates against each job request from the field, to seek the person with the right blend of skills and personality. An applicant may not wish to be considered immediately. VSO therefore keeps a register of interested people who receive job lists and other information at regular intervals.’

For further details contact: VSO, Enquiries Unit, FG 33, 317 Putney Bridge Road, London SW15 2PN.

Erwin Stindl Oration 1989, India

Dr D S Chaudhury, Director, Greater Calcutta Leprosy Treatment and Health Education Scheme, 35/1/A Old Ballygunge First Lane, Calcutta 700 019, West Bengal, India has kindly sent a copy of the 1989 Memorial Oration in memory of Mr Erwin Stindl, entitled ‘Vaccines for leprosy; present status and future prospects’, given by Dr Rama Mukherjee. There are 50 references and the text includes a most useful account of the various vaccine preparations currently under trial in India. Copies are available from the above address.