

Teaching Materials and Services

Neuropathic foot in leprosy, Poona, India—best film award

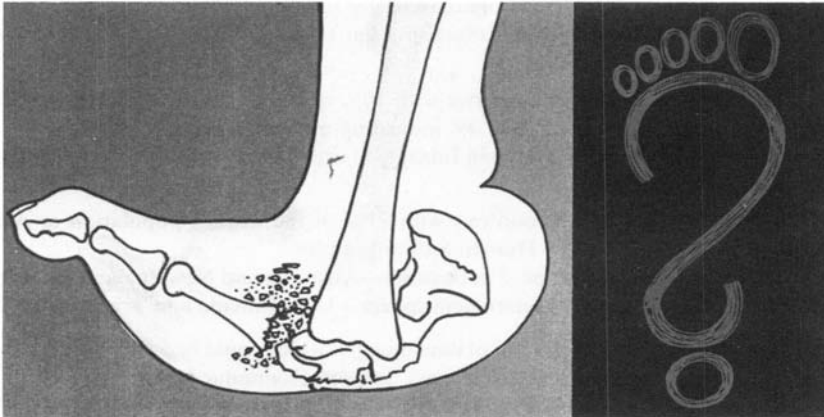
This film received the highest award of Best Scientific Film at the 37th National Film Festival 1990, New Dehli. This documentary was filmed mainly at the routine foot clinics of the Dr Bandorawalla Leprosy Hospital, Kondhawa, with special emphasis on the research work on tarsal disintegration.

The evolution of the foot, its unique features, and certain innovative procedures of 'graded weight bearing' and 'auto-correction of gait' are described. In this work, commendable contributions have been made by Dr Sanjay Sane, Mr Vivek Kulkarni and Mr Anjay Dey. The scientific direction, commentary and overall features were prepared by Dr Mehta, while on the technical side, Director: Mr Vishram Revankar, Cameraman: Mr Vijay Deshmukh and Artist: Mr S Phansalkar have made worthy contributions. The animation sequences explain well the function and pathological changes of the foot. The advantages of bare-foot walking and the better development of the foot without restrictive footwear have been studied in the Indian context. The Producer's Award was conferred on Dr Mehta and the Director's Award on Mr Revankar.

The principles of foot management enunciated in the film are applicable to foot conditions in other peripheral nerve disorders and diseases like diabetes mellitus. The film is ideally suited for medical training.

The film is 25 mins in length. Price: 16 mm film, Rs 9900; for video VHS format of the PAL system, Rs 1600. Postage and packing extra. Enquiries: Dr Jal Mehta, Poona District Leprosy Committee, 35, 'Manisha', 2-A Moledina Road, Pune 411 001, India.

[The 1989 Award was also received by Poona and was reported in *Lepr Rev*, 1990, **61**, 201.]



Eye health at village level

Hanyane: a village struggles for eye health by Erika Sutter, Allen Foster and Victoria Francis is 'a useful, colourfully illustrated book on eye health directed at various categories of community health

workers and their trainers. Presents problems in the area of community eye care and simple, practical ways of solving them using stories, questions, and discussions.

Includes lecture notes on eye diseases, their diagnosis and management at both the village health worker and the ophthalmic assistant levels.' Available from Teaching-aids At Low Cost (TALC) for £3.25, plus postage and handling, at the following address: Teaching-aids At Low Cost (TALC), PO Box 49, St Albans, Herts AL1 4AX, United Kingdom.

The International Human Suffering Index—poster/brochure

The Human Suffering Index statistically rates living conditions in 130 countries. It was created to measure, in a single figure, differences in living conditions between countries. The presentation also allows a side-by-side comparison of rates of population increase and human suffering.

Each individual country index is compiled by adding 10 measures of human welfare related to economics, demography, health and governance: (1) income, (2) inflation, (3) demand for new jobs, (4) urban population pressures, (5) infant mortality, (6) nutrition, (7) clean water (8) energy use, (9) adult literacy and (10) personal freedom.

Each of the 10 measures of well-being is ranked from 1 to 10—the most distressful being 10. For example, Ethiopia receives a rating of 10 in the Infant Mortality Index because 152 Ethiopian children under one year of age die out of every 1000 born, one of the highest rates in the world.

The 10 measures are added together to obtain The Human Suffering index. Those countries with high infant mortality rates, low gross national product per capita, poor supplies of clean drinking water, etc., scored high on the index—close to 100.

Living conditions are worst in Mozambique, followed by Angola, Afghanistan, Chad, Mali, Ghana, Somalia, Niger, Burkina Faso, Central African Republic, Zaire, Benin and Malawi. The most comfortable countries to live in are Switzerland, West Germany, Luxembourg, the Netherlands and the United States, in that order.

Countries rated in The Human Suffering Index were grouped in the following quadrants:

Extreme Human Suffering: The 30 countries with 11% of the world's population or 519 million people registered 75 or greater on The Human Suffering Index.

Of these countries, 24 are in Africa; 6 are in Asia. None is in Europe or the Western Hemisphere.

High Human Suffering: The 44 countries with 58% of the world's population or 2.85 billion people registered between 50 and 74 on The Human Suffering Index.

Of these countries, 16 are in Africa; 16 are in Asia; 11 are in Latin America; 1—Papua-New Guinea—in Oceania; none is in Europe.

Moderate Human Suffering: The 29 countries with 10% of the world's population or 491 million people recorded an index between 25 and 49, indicating moderate levels of suffering.

Of these countries, 10 are in Asia; 7 are in Europe; 11 are in Latin America. Mauritius is the only African country in this category.

Minimal Human Suffering: The 27 countries with 21% of the world's population or one billion people recorded 24 or lower on The Human Suffering Index.

Of these countries 20 are in Europe; 2 in Oceania—Australia and New Zealand; 2 are in Asia—Japan and Singapore; 3 are in the Western hemisphere—U.S., Canada and Trinidad and Tobago.

This publication carries a vast amount of data much of which could be used to further document the association between the prevalence of leprosy and socioeconomic status.

Apply: Human Suffering Index, Population Crisis Committee, 1120 19th Street, NW #550, Washington DC 20036, USA. Price: US \$5.00, pre-paid, per copy.

INFOLEP: Leprosy Information Services

Until 1987 the Leprosy Documentation Service (INFOLEP) aimed at providing international coverage of documentary information concerning mycobacterial diseases to users throughout the

world for the purposes of research, education and policy-making. INFOLEP was a joint project of the Netherlands Leprosy Relief Association (NSL) and the Royal Tropical Institute (KIT).

In October 1987 NSL and KIT terminated the contract of cooperation with regard to INFOLEP and activities were suspended. The aim of becoming a worldwide oriented information centre was not reached because of insufficient personnel, organizational and management problems and a too broad scope of goals. During the period April 1987 till May 1988 external experts provided reports on possible future tasks of INFOLEP. In November 1987 and in July 1988 the Board of NSL took decisions on the future of INFOLEP. It was resolved that INFOLEP should shift from a passive documentation service to a pro-active approach.

INFOLEP restarted as INFOLEP Leprosy Information Services in September 1989 with the following general objective: to strengthen the capacity of the countries with which NSL cooperates, to locally develop, produce and distribute teaching and learning materials in leprosy.

Objectives

To find possibilities to locally develop, produce and distribute teaching and learning materials in leprosy, primarily in countries with which NSL cooperates. If such possibilities are identified and considered feasible, INFOLEP will support such activities, through pilot projects, starting in Indonesia. To make the TLM (available in a given NSL-project) accessible and applicable to other NSL-projects. INFOLEP will have to occupy a linking position between different projects and serve as a back-up centre by setting up and maintaining an information-network for developing, producing and distributing TLM in the various projects.

Means

INFOLEP has an extended collection in the fields of leprosy and leprosy control consisting of journal articles, books, journals, brochures, reports, slides, films and other audiovisual material, which can be consulted and/or borrowed. The greater part of the collection consists of scientific medical material, the smaller part teaching and learning material. Due to the new objective of INFOLEP more attention will be given to this material from now on. The collection is accessible to visitors and students, enquiries by letter will be dealt with.

INFOLEP also offers to NSL-projects the possibility to order, copy and/or borrow literature by inter library loan as well as to arrange literature searches.

Services to TALMILEP

Keeping up-to-date all publications on leprosy available at all ILEP-projects in the form of a bibliography.

INFOLEP Leprosy Information Services being a project of NSL, belongs to the project department of NSL and is based in the NSL office at Wibautstraat 135, 1097 DN, Amsterdam, The Netherlands. Project leader: Ir D J Ponsteen. Information officer: Ms H M Dietrich, librarian/documentalist. Medical adviser: Drs R Verduin, Royal Tropical Institute/Leprosy Unit, Amsterdam.

A consultative expert group has been installed to advise INFOLEP in setting up and maintaining its task. The members represent the following disciplines:

Leprology:	Drs R Verduin (Royal Tropical Institute, Amsterdam).
Library/documentation:	Ms E R M Spruit (Centre for Health Education, Utrecht).
Health education:	Dr H R Folmer (Royal Tropical Institute, Amsterdam).
Information/education:	Dr A Kater (Centre for the Study of Education in Developing Countries, The Hague).
Secretariat:	Ir D J Ponsteen.

African Leprosy Aid

African Leprosy Aid is a small, Midlands-based charity which aims to help leprosy patients and leprosia in Africa. It is mainly geared to the provision of simple aids to prevent damage and disability, but has also supplied transport, sewing machines, water systems, electric pumps and hospital equipment. One of the trustees, Mr Alfred Foster, became interested in disability prevention for leprosy patients after retiring from his work as an engineer. He was invited to Liteta Leprosarium in 1986 by Dr Richard de Soldenhoff and is due to go to Sierra Leone early in 1991, accompanied by his grandchildren, who are gifted musicians. They will give concerts there to raise more money for the work.

Instructions and illustrations of a method for making footwear, using thin rubber, bonded with a neoprene based adhesive, for the soles, together with more information about African Leprosy Aid, are available from Mr Alfred Foster, 6 Foster Road, Woodville, Burton-on-Trent, Staffordshire, England.

TDR: Tropical diseases on the increase

The following is extracted from *TDR News*, No. 32, June 1990:

'Governments are becoming deeply concerned about tropical diseases, to judge by the 43rd World Health Assembly in Geneva this May—the first time since 1980 that the Assembly has considered TDR, at length, as a separate agenda item.

In a resolution on TDR (see p. 3), delegations requested WHO Director-General, Dr Hiroshi Nakajima, 'to ensure the continuation of the Special Programme's global leadership role in tropical disease research', and appealed to the pharmaceutical industry to increase research and development in tropical diseases and step up collaboration with TDR.

During technical discussions, many delegations listed increasing problems with tropical diseases, which dramatically underlined the need for research to improve the delivery of existing tools, and to provide better drugs and treatments.

The Cameroon delegate expressed 'extreme urgency' to find new tools to control malaria. TDR, pleaded Malawi, should intensify its research into vaccines and drugs that could be 'available to everyone'.

In Nigeria, even existing drugs are not getting to those who need them. Under 5% of leprosy patients there are receiving multi-drug therapy. In the resulting vacuum, patients are suffering from illicit trade in fake and substandard drugs, emphasizing the urgent need to develop new cost-effective and practical means of delivering tools that work.

The Congo is seeing a 'resurgence' of parasitic diseases, with two major foci of sleeping sickness, a nearly 3% prevalence of leprosy, increasing schistosomiasis and drug-resistant falciparum malaria. In Zaire 'all diseases are rife in their most severe forms'.

Operational research to find ways to reduce the cost of drug delivery and other control tools is being undertaken in collaboration with WHO's Action Programme on Essential Drugs and the Division of Control of Tropical Diseases (CTD).

There is also urgent need for social research in the field, said Dr Godal, for example, to determine health care and control priorities of the communities themselves. But too few social scientists are prepared to undertake the work'.

TDR: Call for Applications for Support of Research Training (1991)

The UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR), established in 1976, has two objectives:

- (1) research and development of new tools to control the TDR target diseases: malaria, filariasis, trypanosomiasis, leishmaniasis, schistosomiasis and leprosy.
- (2) strengthening of research capabilities in countries where these diseases are endemic.

As an important way to achieve its second objective, TDR provides funding to train research workers from disease-endemic countries. TDR support enables research workers to acquire research skills related to one or more of the TDR target diseases or in a discipline related to these diseases, such as molecular and cell biology, immunology, entomology, parasitology, epidemiology, clinical pharmacology, and the social sciences. Funding is available for opportunities in established training programmes for studies leading to a doctoral level Degree, or for an individualized post-graduate programme in a centre which conducts research in tropical diseases. Support for Masters level courses will be considered in exceptional cases.

The maximum duration of TDR support for research and training is three years. Those eligible to apply for research training include:

- staff members of (i) institutions currently receiving one of the TDR institution strengthening grants, and (ii) other institutions where TDR support for such grants ended two to three years ago;
- scientists from other institutions who are already engaged in research or committed to doing research on one or more of TDR's target diseases, and whose home institution is equipped with required research facilities;
- staff members of Ministry of Health disease control services who are involved in planning, executing and evaluating disease control programmes related to TDR's target diseases;
- scientists who have had appropriate postgraduate training in epidemiology, social sciences, and other field-oriented subjects and who require practical, hands-on (postdoctoral) training in a research project or suitable institution doing field research in one of TDR's target diseases;
- scientists with postgraduate research training who have been actively involved in clinical, field or laboratory research in one of TDR's target diseases for a minimum of five years and who now want to spend a period of time in a suitable research centre or laboratory to upgrade their skills or to carry out specialized experiments or data analyses.

Further enquiries: Dr J A Hashmi, Special Programme for Research and Training in Tropical Diseases, WHO, 1211 Geneva 27, Switzerland.

Water, Engineering and Development Centre, Loughborough, UK

The Water, Engineering and Development Centre (WEDC) is a self funding unit within Loughborough University of Technology devoted to training, research, consultancy and other activities related to the planning, provision, operation and maintenance of water supplies, sanitation and physical infrastructure in developing countries.

WEDC is especially concerned

- with all that is appropriate for rural areas and low income communities;
- with site preparation, water supply, disposal of liquid and solid wastes, roads and communications, buildings, and other services that improve the health and well-being of people living in towns and cities;
- with small-scale irrigation, rural water supply and sanitation and technological facilities for the economic and social development of rural areas;
- with refugees and the relief of natural and man-made disasters;
- with appropriate technology, cost effective design and construction, sustainability through good operation and maintenance, the optimization of institutional support, and health education, mobilization and participation of communities;
- with the integration of technological, social and management inputs for development.

For further information: Information Officer, WEDC, Loughborough University of Technology, Leicestershire LE11 3TU, England.

Leprosy poster from ALM International and Wellcome

There are available 150 sets of Wellcome Tropical Institute posters on leprosy consisting of 9 main themes, which cover all aspects of the disease, in colour together with text. ALM is prepared to send a set free of charge to any *bona fide* applicant but they reserve the right to exercise judgement with regard to appropriate recipients. A covering letter from ALM will accompany each set, together with a questionnaire which should be completed by each recipient and which will greatly aid assessment of the value of these posters for teaching and other purposes. The language is English only. Apply to the Medical Consultant, American Leprosy Missions International, 1 ALM Way, Greenville, South Carolina 29601, USA.

WHO publications 1986–1990

The latest edition of the WHO Publications Catalogue (240 pp) of new books (1986–1990) summarizes WHO policy with regard to publications as follows:

Reliable information is the cornerstone for building the awareness, expertise, and practical strategies necessary to improve the world at its heart: the health—physical, mental, and social—of humanity.

For 40 years the development of reliable information has been one of the functions of the World Health Organization. Charged to act as the world's directing and coordinating authority on questions of human health, WHO has developed a host of networks and mechanisms for generating data, applying facts to problems, and recommending solutions that will lead to sustained improvements in health.

Much of the information developed by WHO is made available to the world through an extensive programme of publications, now numbering 7 periodicals and close to 80 new books each year. Some are practical manuals for use in preventing and controlling disease or developing quality health care. Others are unique guides to internationally accepted procedures, standards, or practice, introducing uniformity to world medical care. Still others attack urgent technical problems with advice formulated and agreed upon by international groups of experts.

Action Health 2000, Cambridge, UK

Based at Bath House, Gwydir Street, Cambridge, UK, this organization is concerned with various aspects of health care in Third World countries, but has given emphasis to elective periods abroad for medical students, nurses and other health paramedical workers. In association with the Bureau for Overseas Medical Services (Africa Centre, 38 King Street, London WC2E 8JT), AH 2000 has produced an 'electives booklet', which deals with all aspects of preparing for an elective overseas, including practical organization, communication, the role of an elective student and personal health care. The booklet is available from BOMS.

The spring meeting of AH 2000 was held in Sheffield and the programme included talks on: Sheffield University's Third World Community Health Research Programme; primary dental care in India; facing up to AIDS and the Economic Crises in Zambia; action on disability and development; programmes with disabled people; ageing in developing countries.

Tuberculosis skill book, Marie Adelaide Centre, Karachi, Pakistan

This 202 pp book, of typed format, is published by the Training Department of the Marie Adelaide Centre. The introduction modestly describes the objectives as helping the reader to learn skills needed to diagnose and cure individual tuberculosis patients and control the disease, whilst at the same time, '... enabling you to become a competent and successful tuberculosis technician, who knows his job and loves his work and his patients'. (The term technician in this context describes a health or paramedical worker.) The whole subject is covered extremely thoroughly and the book is well illustrated throughout with line drawings. Although essentially for use in Pakistan, this book is exceptional in its range and quality and could, with some modification, be valuable in many other tuberculosis-endemic countries.

For further details write to: Marie Adelaide Centre, Mariam Manzil, AM 21, off Shahrah-e-Liaquat, POB No. 8666, Karachi-03 Pakistan.

TALMILEP—Catalogue of teaching and learning materials

Health workers in leprosy endemic countries are faced with a shortage of suitable teaching and learning materials. Printed materials do exist, but often do not reach the people who need them. In order to overcome this problem, The Leprosy Mission International operates a distribution service, and is in contact with health staff in 112 countries. This service is carried out in co-operation with other member associations of ILEP (International Federation of Anti-Leprosy Associations).

A revised catalogue is now available, and contains information about 31 titles in English, selected for those involved in leprosy control, patient care and training activities.

Copies of the catalogue may be obtained from: Teaching and Learning Materials, The Leprosy Mission International, 80 Windmill Road, Brentford, Middlesex, TW8 0QH United Kingdom.

Colour transparency teaching sets for India

Glindia Ltd (formerly Glaxo Laboratories (India) Ltd), Dr Annie Besant Road, Bombay 400 025, India, now have 18 colour transparency slide sets, with written text, on a wide range of subjects in clinical medicine, sexually transmitted diseases and dermatology. The set of 48 slides on leprosy has been updated recently and is composed entirely of Indian patients. The authors are Dr V D Parekh, Dr R Ganapati and Dr Chetan Oberai, all from Bombay. A price list is available on application from Dr Pritam Phatnani, Head of Medical Education at the above address.

Steam sterilization 'slide set'

Steam sterilization of reusable syringes and needles has been adopted as the preferred global policy of the Expanded Programme on Immunization and over 100,000 portable steam sterilizers have been distributed to the field in the last two years. The most recent addition to the range of training materials available from the EPI unit in Geneva is the 'Sterilization Slideset'.

The set of 48 slides, packed in an A5 size plastic folder with an English and French commentary, is intended to be used during the practical training of health workers in the use of steam sterilizers and reusable plastic syringes. The first 26 slides are focused on the process of loading the sterilizer and conducting a sterilization cycle. The remainder of the slides show the sterile techniques to be followed when assembling syringes for use and the mechanical cleaning of the syringes and needles.

The slideset was prepared by the EPI using funds and facilities provided by Prestige Medical, United Kingdom.

(Source: *Essential Drugs Monitor*, No. 8, 1989, WHO, CH-1211, Geneva 27, Switzerland.)

Clinical guidelines: diagnostic and treatment manual

A therapeutic guide for nurses, medical assistants and doctors in hospitals, health centres, dispensaries and refugee camps. It summarizes etiology, prevention, diagnosis and treatment of approximately 200 common diseases and complaints and is based on many years of practical field work.

The book is very successful in combining recommendations by technical organizations, such as WHO, and standard specialist handbooks with the practical experience of organizations, such as Médecins sans Frontières, UNICEF and UNHCR. The result is a highly practical manual which can serve for both training and reference. Its size and price make it as essential as the drugs it is intended to accompany.

Available in French, English and Spanish from Médecins sans Frontières, 68 Bd. St-Marcel, 75005 Paris, France. Price FFr 87 (approximately \$15.00). Add postage FFr 10 (Europe), FFr 20 (outside Europe).

(Source: *Essential Drugs Monitor*, No. 8, 1989, WHO, CH-1211, Geneva 27, Switzerland.)

Making low-cost spectacles

Christoffel Blindenmission (CBM) have come up with a system for producing spectacles locally in most African countries. They are based in Germany and have so far set up 25 workshops in more than 15 countries.

It trains local indigenous workers, the training takes about four weeks and trainees need little previous formal education.

80% of demand for spectacles in many African countries south of the Sahara can be met with spherical lenses, mainly for people with long-sightedness in old age and those who had cataract operations. The demand for glasses to correct short sight is currently low.

Christoffel Blindenmission has a set of guidelines for setting up optical workshops, the approximate cost of setting up a workshop is US\$625–875. Some tools need to be imported, but others will be available locally.

The workshops can easily produce two pairs of glasses per hour of work which can add up to 3000 pairs a year. This is enough to keep the average eye clinic or mobile unit well stocked. Most of the workshops soon become self supporting and even return a profit if properly managed.

Details are available from: Program for the prevention of Blindness, World Health Organization, 1211 Geneva 27, Switzerland.

(Source: *Health Lines* a quarterly newsletter concerning general and personal health matters. OXFAM, 274 Banbury Road, Oxford OX2 7DZ, England.)

Leprosy; a guide for professional workers; TLM, South Africa

This booklet was originally compiled by Dr E McCabe, former consultant at Westfort Hospital, South Africa. The 15 pages cover definition, world distribution, aetiology, spread, types of leprosy, clinical signs, chemotherapy, reactions, rehabilitation, surgery, care of the hands and eyes, control schemes and research. The initiative in the production of special shoes made of canvas, deepened for Plastazote or sponge rubber, with Velcro straps, is particularly interesting. Further details of this approach have been published elsewhere in this Journal (**60**, 332 and **61**, 291).

Further enquiries to: The Reverend L A Wiseman, The Leprosy Mission (Southern Africa), PO Box 890527, Lyndhurst 2106, Republic of South Africa.

Chemotherapy of leprosy for control programmes. Video

This video describes the recent regimens of drug treatment for leprosy, based on the Report of a WHO Study Group. The intended audience includes—medically qualified doctors, senior personnel in ministries of health in leprosy-endemic countries, tutors and teachers in medical and para-medical schools, programme planners, leprosy control officers and supervisors, senior staff in pharmacies, drug supply and distribution.

The subject matter covers the classification of leprosy according to both Madrid and Ridley–Jopling systems; definition of pauci- and multi-bacillary leprosy; unit dosage and regimens of dapsone, rifampicin, clofazimine and the thioamides for the treatment of both pauci- and multi-bacillary cases. In order to ensure the safe and effective implementation of multiple drug therapy for as many patients as possible and with the minimum of delay, repeated emphasis is given to the importance of the training, retraining and supervision of the health personnel concerned.

Available from: Department of Medical Illustration, John Radcliffe Hospital, Headington, Oxford OX3 9DU, England. Cost: £16 (US\$25) plus postage.

Leprosy—the misunderstood disease. Film

The above colour film has been produced by the Katharina Kasper Leprosy Control Scheme, Bangalore. It runs for 21 minutes and was directed by Mr T S Ranga. The medical expertise in the production of this film was provided by Dr M S Nilakanta Rao (who has also written the script), Dr E Vomstein and Mr H Meermeier. At present the film is available in three languages: English,

Kannada and Tamil. Production in other languages, eg Telegu, Urdu, Hindi and Marathi are also contemplated.

Further enquiries about cost and despatch to: Project Officer, Katharina Kasper Leprosy Control Scheme, 16 Hutchins Road, Cooke Town, Bangalore 560 005, Karnataka, India.

Transmission of HIV in health-care settings

The following is the summary of an article published in the *Bulletin of the World Health Organization*, **67**(5): 577–82 (1989), entitled, 'Transmission of human immunodeficiency virus (HIV) in health-care settings worldwide':

Based on the information available, transmission of human immunodeficiency virus (HIV) can and does occur in health-care settings. No cases of such transmission have been reported from an infected health-care worker to a patient. Transmission of HIV from an infected patient to a health-care worker has been documented after parenteral or mucous-membrane exposure to blood. However, this risk is < 1%, is limited to exposure to blood, and can be further minimized through adherence to routine infection control measures. Patient-to-patient transmission through invasive equipment or through HIV-infected blood, blood products, organs, tissues, or semen also occurs but can be prevented by proper sterilization of instruments and through donor-deferral, donor screening, and heat treatment of Factors VIII or IX to inactivate the HIV. In health-care settings, prevention of HIV transmission requires education of all health-care workers and ancillary staff, provision of necessary equipment, and strict adherence to general infection control practices.

Health Technology Directions; Immunisation

Health Technology Directions (Vol. 9, No. 2, 1989) gives an excellent account of the subject of immunization with an emphasis on: (1) the continued use of current vaccines, as well as the introduction of new, more effective and more stable ones; (2) the development and improvement of cold chain technologies to safely transport, store and distribute vaccines; (3) the development and improvement of injection technologies to ensure proper administration of vaccines and safe handling of injection equipment; and (4) efficient programme management that strive to achieve and sustain expanded coverage and service delivery through improved training, supervision, evaluation and community mobilization. The main vaccines in common use are described in detail. With regard to BCG, the correct storage temperature is between +2°C and +8°C; maximum storage times are up to 8 months in central store; up to 3 months at regional level; up to 1 month at health centre level and up to 1 week in transport. Expiry dates should always be checked before use. As usual this issue contains much of practical value. PATH (Program for Appropriate Technology in Health) is, '... a non-profit, international organization devoted exclusively to the development and application of appropriate health technologies for primary health care programmes in developing countries'. Address: 4 Nickerson Street, Seattle, WA 98109-1699, USA.

Community Health Support Services (CHESS)

The Department of International Community Health, Liverpool School of Tropical Medicine, Pembroke Place, Liverpool L3 5QA, England provides up-to-date information, useful literature and practical advice. It is developing a new service for field workers in health, nutrition and population programmes in developing countries.

Appropriate Health Resources and Technologies Action Group (AHRTAG)

AHRTAG provides an information and enquiry services to health workers in developing countries. It also publishes practical manuals and newsletters about a variety of topics, including AIDS, disability, dental and diarrhoeal diseases. There is a resource centre and courses and workshops are organized for health workers. Address: 1 London Bridge Street, London SE1 9SG, England.