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INTERNATIONAL
CHILD HEALTH UNIT

DEPARTMENT OF PEDIATRICS
UPPSALA UNIVERSITY



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INSTITUTIONEN FÖR PEDIATRIK
UPPSALA UNIVERSITET



"Health into teaching".

Books and other material useful for getting health into
the curriculum of primary and secondary school.

English version

ICH

1993

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Mailing address

ICH
S-751 85 UPPSALA
Sweden

Telephone

National (018) 66 59 96
(018) 66 30 00
Internat. +46 18 66 59 96
+46 18 66 30 00

Fax

National (018) 50 80 13
(018) 51 53 80
Internat. +46 18 50 80 13
+46 18 51 53 80

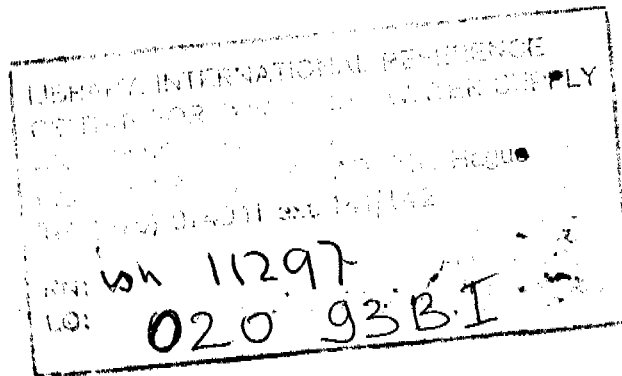
Telex

National 8195007 ICH
Internat. 8195007 ICH S

Visiting address

University Hospital
Entrance 11

020-9301-11297



Bibliography

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English version

Compiled by

Ninni Uhrus Timane

RNT, Public Health

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Foreword:

This document was originally written in Portuguese on request from the Ministry of Education in Guinea-Bissau, under the title "Bibliografia, Educação para a vida familiar e em Material de População do INDE". The aim was to collect material appropriate for getting the subject health into the curriculum at primary and secondary-school level and for this get suggestions of books and other material. The bibliography has been prepared at ICH, Department of Pediatrics, Uppsala University, Sweden, and financed by SIDA.

Since some of the material could be valuable also for English-speaking countries it is now presented in an English, slightly revised version.

The material has been selected from among the most up-to-date literature available on the subject and all the books and other material exist in the ICH library.

On compiling this material we have chosen books and other papers that we as a first step think should be given priority.

All the books are included in the "bibliography-list" by alphabetic order of the *titles*. The list also includes: *author, editor, year, number of pages, ISBN* (international standard book number), *publisher, available from, key words, abstract, and comments*, based on our opinion on the book.

From the complete list of 67 books a number of 20 books have been selected as recommended books for teachers and 17 books which can be used as supplementary readers by the students.

- No. 1 Titel **A Simple Cure.** Child to child readers. Level 2.
 Author Hawes, Colette
 Editor
 Year 1985 Pages 46 ISBN 0-582-89511-1
 Publisher Longman, Harlow, England
 Avail. from TALC
 Key words diarrhoea, rehydration, child-to-child
 Abstract Emphasises the danger of diarrhoea in young children. Shows children how to prevent death from diarrhoea by acting promptly and using a very simple remedy.
 Comments For students.
- No. 2 Titel **Accidents.** Child to child readers. Level 1.
 Author Hawes, Hugh
 Editor
 Year 1987 2nd edition Pages 30 ISBN 0-582-89509-X
 Publisher Longman, Harlow, England
 Avail. from TALC
 Key words accidents, prevention of accidents, child-to-child
 Abstract Highlights some of the many places around the home where serious accidents can happen. The book informs children about safety precautions, and encourages them to take responsibility for the care of their younger brothers and sisters.
 Comments For students.
- No. 3 Titel **AIDS handbook.** A guide to the understanding of AIDS and HIV.
 Author Hubley, John
 Editor
 Year 1990 Pages 95 ISBN 0-333-52007-6
 Publisher Macmillian, London
 Avail. from TALC
 Key words HIV, AIDS
 Abstract Gives considered and careful thought to the disease , its origins, symptoms and methods of transmission. It will be invaluable to all involved with AIDS education, especially in developing countries. It provides those involved in community work with a thorough knowledge of the symptoms and progression of the disease so that they are confident to counsel both those already infected and those at risk in the community at large. The book gives guidance in the counselling of those with AIDS and HIV and lays out a practical and comprehensive action plan for running an AIDS prevention programme to reach all sections of the local community.
 Comments Reference book.

No. 7 Titel **All for Health** A resource book for Facts for Life
 Author Williams, Glenn
 Editor UNICEF WHO UNESCO
 Year 1990 Pages 73 ISBN
 Publisher New York
 Avail. from UNICEF, Facts for Life Unit, 3 UN Plaza, New York, NY 10017, USA
 Key words child health, communication
 Abstract This book is about - and for - everyone who can help communicate today's child health knowledge to parents and communities in the developing world.
 Comments For students and teachers. A simple handbook on how to communicate the ten messages in the book "Facts for Life". Twelve steps in health communication. Clear and instructive language.

No. 8 Titel **Better Child Care**
 Author Tregoning, M.A and Bova, G.S
 Editor
 Year 1987 Pages 64 ISBN 0-333-39305-8
 Publisher Macmillan, London
 Avail. from
 Key words child care, teaching
 Abstract This book can be used by anyone working for the health of young children. Whenever you show this book to people they become interested in the pictures. Then they begin to ask questions. This creates an interest in the subject. This is the right atmosphere for teaching. You can use the messages and illustrations in the book to give you ideas for making your own teaching aids, such as flash cards and posters.
 Comments

No. 9 Titel **Blaming Others** Prejudice, race and worldwide AIDS
 Author Sabatier, Renée
 Editor Tinker, Jon
 Year 1988 Pages 167 ISBN 1-870670-03-5
 Publisher Panos Institute Norwegian Red Cross
 Avail. from Panos Publications Ltd, 8 Alfred Place, London WC1E 7EB, UK
 Key words HIV, AIDS, social aspects
 Abstract Shows forcefully that too much attention has been paid to casting blame, and too little attention to action, especially in response to the growing vulnerability of the world's poor. It should be read by anyone concerned with how we respond to AIDS, and how we address the problem of unbalanced development.
 Comments Reference book.

- No. 10 Titel **Child-to-Child. A Resourse Book**
- Author
- Editor **Bonati, Grazyna and Hawes, Hugh**
- Year 1992 Pages 240 ISBN 0946182019
- Publisher **Child-to Child Trust**
- Avail. from **TALC**
- Key words **evaluation, child-to-Child, workshop,**
- Abstract **This book collects together several Child-to-Child Publications in one volume. It contains all the Child-to-Child Activity Sheets as well as a detailed description of the Child-to-Child Methodology. It also contains practical advice on how to run a workshop and how to organise an evaluation.**
- Comments **For teachers. This book includes all the activity sheet, plus "Approaches to Learning and Teaching", "Doing it Better" and "How to Run a Workshop".**
- No. 11 Titel **Child-to-child. Another path to learning.**
- Author **Hawes, Hugh**
- Editor
- Year 1988 Pages 128 ISBN 92820-1049-X
- Publisher **UNESCO Institute for Education, Hamburg**
- Avail. from **Feldbrunnenstrasse 58, D 2000 Hamburg 13, Germany**
- Key words **child health, teaching, child-to-child**
- Abstract **Child-to-child: an alternative approach to basic learning and basic health care. How it started and how it grew. The next ten years - current impact and future plans. Case studies. Child-to-child in schools - a revolution in disguise. Child-to-child - integration of school and community learning. Child-to-child materials. Fifty examples of Child-to-child activities from around the world.**
- Comments **For teachers**
- No. 12 Titel **Community-Based Rehabilitation of the Rural Blind**
 A Training Guide for Field Workers
- Author **Horton, J.Kirk**
- Editor
- Year 1986 Pages 131 ISBN 0-915173-04-2
- Publisher **Helen Keller International**
- Avail. from **Helen Keller International, 15 West 16th Street, New York**
- Key words **blind, community based rehabilitation**
- Abstract
- Comments **Reference book. Simple text and many clear illustrations.**

No. 13 Titel **Deadly Habits.** Child to child readers. Level 3.
Author Hawes, Hugh
Editor
Year 1989 Pages 32 ISBN 0-582-03638-0
Publisher Longman, Harlow, England
Avail. from TALC
Key words smoking, drugs, STD, child-to-child
Abstract Intended for elder children(12-14 years). Considers the pressure which adolescents living in towns face when they enter adulthood. They are under pressure from others to look "grown up" by smoking and drinking and having early sex. But these actions, these days , can have deadly consequences. In addition, we have even worse ones: the growth of drug-taking and the spread of AIDS.
Comments For students.

No. 14 Titel **Dirty Water.** Child to child readers. Level 1.
Author Cripwell, Ken
Editor
Year 1987 Pages 32 ISBN 0-582-89507-3
Publisher Longman, Harlow, England
Avail. from TALC
Key words water, polution, child-to-child
Abstract Highlights some of the dangers found in and around water. The book informs children about how to recognise and avoid dirty water, and how to help solve polution problems.
Comments For students.

- No. 15 Titel **Disabled Village Children.**
 A guide for community health workers, rehabilitation workers, and families.
- Author Werner, David
- Editor
- Year 1987 Pages 654 ISBN 0-942364-06-6
- Publisher The Hesperian Foundation, Palo Alto, USA
- Avail. from TALC
- Key words disability, rehabilitation, child health
- Abstract A book of information and ideas for all who are concerned about the well-being of disabled children. Especially for those living in rural areas where resources are limited. Gives a wealth of clear, simple but detailed information concerning most common disabilities of children; many different physical disabilities, blindness, deafness, fits, behavior problems and development delay. It gives suggestions for simplified rehabilitation, low-cost aids, and ways to help disabled children find a role and be accepted in the community. Above all the book helps us to realize that most of the answers for meeting these children's needs can be found within the community, the family and in the children themselves.
- Comments Reference book. Full of drawings and photos that in detail show practical suggestions and solutions.
- No. 16 Titel **Diseases Defeated.** Child to child readers. Level 2.
- Author Mugisa, Violet and Hawes, Colette
- Editor
- Year 1989 Pages 40 ISBN 0-582-03637-2
- Publisher Longman, Harlow, England
- Avail. from TALC
- Key words immunization, child-to-child
- Abstract Shows how most diseases can be defeated if mothers and children are vaccinated or immunised at the right time. The children from Kampala Primary School in Uganda made up a play about a meeting of killer diseases, in which the main topic of discussion is how to combat the threat posed to the disease by WHO, UNICEF and Child-to Child. Their play forms the basis of this reader.
- Comments For students.

No. 17 Titel **Down with Fever.** Child to child readers. Level 2.
 Author **Edwards, Pauletta**
 Editor
 Year 1987 Pages 48 ISBN 0-582-89510-3
 Publisher **Longman, Harlow, England**
 Avail. from **TALC**
 Key words **fever, caring for a sick child, child-to-child**
 Abstract **Highlights the dangers of pneumonia. Emphasises the importance of early treatment, and shows the important part older children can play in fighting the illness.**
 Comments **For students**

No. 18 Titel **Dr Kalulu's special.** World AIDS Day Magazine.
 Author
 Editor
 Year Pages 12 ISBN
 Publisher **Anti AIDS project, P Bag RW 75X 15102 Ridgeway, Lusaka, Zambia**
 Avail. from
 Key words **HIV, AIDS, AIDS-Club**
 Abstract
 Comments **Magazine for young people. Pages with information about the "Anti-AIDS Club".**

No. 19 Titel **Education for health** A manual on health education in primary health care.
 Author
 Editor **WHO**
 Year 1988 Pages 261 ISBN 92-4-154225-x
 Publisher **Macmillan**
 Avail. from **WHO**
 Key words **health education, behavior, planning, communication**
 Abstract **This manual will help community health workers provide appropriate education that uses local resources, and involves local people. It covers the relationship between behaviour and health, and the role of health education in helping people to adopt healthier life-styles. Ways of working with people that establish good relationships, help clear communication, encourage participation, and avoid prejudice are discussed, and the elements of planning for health education in primary health are outlined. Health education methods appropriate for use with individuals, groups and whole communities are described, and detailed guidance is given on how to use these methods, and how to adapt them to suit local needs.**
 Comments **Reference book.**

No. 20 Titel **Facts for Life**
 Author Adamson, Peter and Williams, Glen
 Editor UNICEF WHO UNESCO
 Year 1990 Pages 78 ISBN
 Publisher Ed.Seguradosar, 13 andar-70072-Brasilia-DF
 Avail. from TALC
 Key words Family planning, safe motherhood, breastfeeding, child growth, immunization,
 Abstract A challenge to communicators of all kinds. The health of children in the developing world could be dramatically improved if all families were empowered with today's essential child health information. This book is for all those who can help to make its content part of every family's basic stock of child-care knowledge.
 Comments For students and teachers. Very valuable, brings together today's vital information on child health. Ten messages summarize the child health knowledge.

No. 21 Titel **Family care.**
 Author Skeet, Muriel
 Editor
 Year 1981 Pages 126 ISBN 0-333-32164-2
 Publisher Macmillan, London
 Avail. from
 Key words family health
 Abstract Gives practical advice on all aspects of family health. In the first section it shows what is important for good health such as hygiene, sanitation, nutritional food and shelter. The next part describes how to care for mothers during pregnancy and for the body during its early years. Lastly, it explains how to prevent simple diseases, to care for sick people and how to deal with accidents in the home and at work. Will be useful for parents, teachers and health workers and all those involved in family and self-care.
 Comments

- No. 22 Titel **Finding the causes of child malnutrition A community handbook**
 Author Brown, Judith E. and Brown, Richard C.
 Editor Bureau of Study for the Promotion of Health
 Year 1987 Pages 87 ISBN
 Publisher Kangu-Mayombe, Zaire.
 Avail. from
 Key words nutrition
 Abstract This handbook is for health workers who want to attack Protein-Energy Malnutrition of children in their own communities. This handbook is written to help answer 3 important questions:
 1. How do you measure community malnutrition ?
 2. What are the food problems in your community ?
 3. Which problem should you attack ?
 This handbook is written in basic English. A person who has finished six years of school will be able to read and follow this book.
 Comments Clear, short and simple text with many photographs, drawings and gaphs. Large print.
- No. 23 Titel **First Aid for community health workers in developing countries**
 Author Skeet, Muriel
 Editor
 Year 1984 Pages 106 ISBN 0-333-36385-X
 Publisher Macmillan, London
 Avail. from
 Key words first aid
 Abstract Provides practical, accurate, up-to-date and clear details of the emergency care needed for almost all emergencies. Designed for use by primary health workers in developing countries and so discusses emergencies relating to the tropics in addition to those which can occur anywhere in the world. Written with the assumption that the patient and first-aider do not have easy access to a hospital, and immediate aftercare in the community is therefore also included.
 Comments For students and teachers. Clear language and many instructive drawings.
- No. 24 Titel **Flies. Child to child readers. Level 2.**
 Author Hawes, Colette
 Editor
 Year 1989 Pages 40 ISBN 0-582-03649-6
 Publisher Longman, Harlow, England
 Avail. from TALC
 Key words environment, flies, hygiene, child-to-child
 Abstract Tries to show how children can help to improve their environment by fighting flies which can carry disease.
 Comments For students.

No. 25 Titel **Good Food.** Child to child readers. Level 1.
 Author Hawes, Colette
 Editor
 Year 1987 Pages 30 ISBN 0-582-89508-1
 Publisher Longman, Harlow, England
 Avail. from TALC
 Key words nutrition, child-to-child
 Abstract Attempts to show children how important food is to their growth and development. Explains the values of many local foods and shows how good food can improve health and happiness.
 Comments For students.

No. 26 Titel **Guidelines for training community health workers in nutrition**
 Author
 Editor WHO
 Year 1986 2nd edition Pages 121 ISBN 92-4-154210-1
 Publisher WHO, Geneva
 Avail. from WHO
 Key words nutrition, training
 Abstract Designed primarily for trainers, this book provides practical advice in simple language on how to impart nutritional knowledge through a task-oriented approach. The first part deals mainly with teaching skills and basic nutritional knowledge; it is intended to help trainers to teach better and to focus on the type of nutritional knowledge community health workers need. In the second part there are nine modules each dealing with a specific nutritional topic and describing particular tasks related to it. The subjects covered in the modules include, for example: growth monitoring of children; feeding of infants and young children; breast-feeding; nutritional care of mothers; identification, management, and prevention of common nutritional deficiencies; and nutritional care during diarrhoea. Trainers will find this book useful for planning nutritional training or for revising existing plans with the object of making their training courses more effective.
 Comments Reference book.

- No. 27 Titel **Happy Healthy Children. A child care book.**
 Author **Hampton, Janie**
 Editor
 Year 1985 Pages 143 ISBN 0-333-39030
 Publisher **Macmillan, London**
 Avail. from
 Key words child care, hygiene, nutrition, prevention, child-to-child
 Abstract A source book for all those entrusted with the care of children - parents, teachers, community health workers and nurses. It covers the basic principals of good health including nutrition, hygiene and prevention of illness as well as the action to take on illnesses and injuries. It includes family life education and discusses child development and the importance of children's happiness of play, exercise and stimulating activities. The suggestions for activities will be found to be as useful in the home as in the classroom. Portions of the book are addressed directly to children and could be given to older children to read, especially to older sisters and brothers who may help to look after younger children at home, in the spirit of the international "Child-to-child" programme. Secondary school students in biology, health science, home economics and domestic science can use the book to supplement their courses. It is also recommended to teacher training and nursing and health students.
 Comments For teachers and students.
- No. 28 Titel **Health Care Together.**
 Training Exercises for Health Workers in Community Based Programmes
 Author **Johnston, Mary and Rifkin, Susan**
 Editor
 Year 1987 Pages 120 ISBN 0-333-44348-9
 Publisher **Macmillan, London**
 Avail. from **TALC**
 Key words teaching
 Abstract Designed to develop skills of communication, teamwork, leadership, planning and participatory methods of teaching and learning. Relevant to trainers of primary health care workers, trainers and instructors in adult education, rural and agricultural extension and other community development programmes.
 Comments For teachers. Clear language and illustrations. Full of practical ideas.

No. 29 **Titel** **Health Education. Pupil's book.** Basic Primary Science & Health for Uganda.

Author Ministry of Health, Uganda

Editor

Year 1988 **Pages** 87 **ISBN**

Publisher UNICEF, Uganda

Avail. from Ministry of Health, P.O. Box 7047 Kampala, Uganda

Key words health education

Abstract This Basic Primary Health Course for Uganda has been designed to help your pupils learn about health. It also aims to help your pupils incorporate good health habits into their daily life. Based on the concept Child-to-child.

Comments For students. Clear explanations and illustrations. Adapted to the reality of Uganda. There are at least seven books.

No. 30 **Titel** **Health into Mathematics.** Health across the curriculum.

Author Gibbs, Willaim and Mutunga, Peter

Editor

Year 1991 **Pages** 163 **ISBN** 0-582-05839-2

Publisher Longman, Harlow, England

Avail. from TALC

Key words mathematics, health education, child-to-child

Abstract The first book in the Health Across the Curriculum series, an exciting new series of books designed for student training to be primary teachers and for those already teaching. Health education is now seen as a vital part of the primary curriculum. The Health Across the Curriculum series helps teachers to link health education with the main subjects taught in the primary classroom. The organization of Health into Mathematics makes it easy to use. A detailed introduction explains the idea of the series and the Child-to-Child approach. The book then suggests how three key areas of mathematics - statistics, percentage and ratios - may be taught through health activities. The second part of the book demonstrates how vital health topics including nutrition, sanitation and treatment of diarrhoea may be taught by bringing in the different mathematics activities suggested. Busy teachers can easily find the health of mathematics activity they need by referring to the Health of Mathematics Chart at the end of the book. Extensive cross-referencing allows teachers to follow up successful lessons with further relevant mathematics or health activities and the level of difficulty of activities is indicated throughout the book.

Comments For teachers. Shows teachers in primary schools how to combine teaching health education and maths.

No. 31 Titel **Healthy Living Healthy Loving.**
 A guide to happy, healthy relationships and family life.

Author Hampton, Janie

Editor

Year 1987 Pages 181 ISBN 0-333-43975-9

Publisher Macmillian, London

Avail. from

Key words human body, relations, reproduction, family planning, smoking, STD.

Abstract Using plain language and many illustrations the book provides advise on responsible relationships, facts about human reproduction, a sympathetic approach to young people's emotions, a guide to healthy life-style.

Comments For students and teachers.

No. 32 Titel **Helping Health Workers Learn**
 A book of methods, aids, and ideas for instructors at the village level

Author Werner, David and Bower, Bill

Editor

Year 1987 Pages 632 ISBN 0-942364-10-4

Publisher Hesperian Foundation, Palo Alto, USA

Avail. from TALC

Key words teaching methods

Abstract A collection of methods, aids and "triggers of imagination". Written in clear, fairly basic English, for use by village instructors who may have limited formal education. Hundreds of drawings and photographs emphasize the key points. Based on sixteen years of experience with a villager-run health program in the mountains of western Mexico. Although many of the teaching ideas described here were developed in Latin America, methods and experiences from at least thirty-five countries around the world are discussed. One section of the book concerns helping workers learn how to use the village health care handbook *Where There is no Doctor* by David Werner. The focus of *Helping Health Workers Learn* is educational rather than medical. It has been written especially for instructors and health workers who identify with the working people and who feel that their first responsibility is to the poor. Rather than trying to change people's attitudes and behavior, this community-based approach tries to help people analyse and change the situation that surrounds them.

Comments For teachers.

No. 33 Titel **Helping Mothers to Breast Feed**
 Author King, F.Savage
 Editor
 Year 1987 Pages 151 ISBN
 Publisher **AMREF**
 Avail. from **AMREF, P O Box 30125, Nairobi, Kenya**
 Key words **breast-feeding**
 Abstract Summarizes the most up-to-date ideas about breast feeding and gives detailed practical guidance on how to prevent problems and how to help mothers who do have a problem.
 Comments **Reference book.**

No. 34 Titel **How to make Simple Disability Aids**
 Author Maczka, Kathy Danbrough, Ann and Birke, Deborah
 Editor
 Year 1992 Pages 74 ISBN 0907320120
 Publisher **AHRTAG**
 Avail. from **TALC**
 Key words **disability aids, sitting aids, walking aids, physiotherapy aids,**
 Abstract This book shows, with many illustrations how to make simple aids - low in cost and quick to repair - for sitting, walking and physiotherapy exercises, to be used in hospital or at home.
 Comments **For teachers and students. A new revision of Simple Aids for Daily Living. Many illustrations. Minimum text.**

No. 35 Titel **I Can Do It Too. Child to child readers. Level 2**
 Author Waljee, Anise
 Editor
 Year 1989 Pages 48 ISBN 0-582-03636-4
 Publisher **Longman, Harlow, England**
 Avail. from **TALC**
 Key words **rehabilitation, child-to-child**
 Abstract Tells the stories of three children who have one thing in common: they all have a physical handicap, which they learn to accomodate with the help and support of other children. Addresses the attitudes to handicap.
 Comments **For students.**

- No. 36** **Titel** **In the Shadow of the City. Community health and the urban poor.**
Author Harpham, Trudy Lusty, Tim and Vaughan, Patrick
Editor
Year 1988 **Pages** 236 **ISBN** 0-19-261698-6
Publisher Oxford University Press Oxford
Avail. from
Key words community health service, urbanization
Abstract Reviews the health and health-related problems, and needs of unserved and underserved population in urban setting; it illustrates selected experiences of governments and non-governmental organizations which face these major and ever-increasing problems and are determined to bring about solutions.
Comments Reference book and for students at higher levels.
- No. 37** **Titel** **Know your Body. Structure, function and development - for community health education programmes**
Author Skeet, Muriel
Editor
Year 1986 **Pages** 124 **ISBN** 0-333-38618-3
Publisher Macmillan, London
Avail. from
Key words human body
Abstract Many people are ill-informed about what is going on in their bodies. The aim of this book is to provide an understanding of the elementary biology of the human body, particularly of its component parts which are then related to the various stages of growth, development and change which occur during a life-time. The book is written for primary health care workers, teachers, and students of health science, human biology or nursing. Its clear and simple approach will also make it interesting to the general reader. Thus the author hopes that this book will contribute to increased self-knowledge, responsible self-care and, where appropriate, to competent community self-help.
Comments For students and teachers.
- No. 38** **Titel** **Learning about AIDS A manual for pastors and teachers**
Author Rubensson, Birgitta
Editor
Year 1989 **Pages** 34 **ISBN**
Publisher World Council of Churches
Avail. from CMC / WCC, PO Box 2100, 1211 GENEVA 2, Switzerland
Key words HIV, AIDS, teaching, counselling
Abstract
Comments For teachers. Clear and simple language and drawings.

- No. 39 Titel **Manual on Feeding Infants and Young Children**
 Author **Cameron, Margaret and Hofvander, Yngve**
 Editor
 Year 1990 3rd edition Pages 214 ISBN 0-19-261403-7
 Publisher **Oxford Medical Publications, Oxford**
 Avail. from **TALC**
 Key words **child nutrition, breast-milk, proteins in human nutrition**
 Abstract **Designed for those involved with health and nutrition, particularly in developing countries. Describes simple methods for monitoring growth and screening "at risk" children, especially those with malnutrition. Guidance is given for the preparation of simple multi-mixes and for using foods from the family cooking-pot to make the meals. The importance of breast-feeding is strongly emphasized: its management is described in some detail as well as the suitable timing for introducing complementary foods. Recent figures from FAO are used in the food tables for planning and assessing diets.**
 Comments **Reference book.**
- No. 40 Titel **My name is today**
 Author **Morley, David and Lovel, Hermione**
 Editor
 Year 1988 Pages 359 ISBN 0-333-43301-7
 Publisher **Macmillan, London**
 Avail. from **TALC**
 Key words
 Abstract **This book is about children and their families in the developing world shown through illustrations, cartoons, graphs and line drawings. The book is for the many people who have little time to keep abreast of the enormous and increasing literature on health care.**
 Comments **For teachers. A book full of illustration good for getting a discussion started. Also good for making over-heads.**
- No. 41 Titel **Not Just a Cold. Child to child readers. Level 1.**
 Author **Hawes, Hugh**
 Editor
 Year 1989 Pages 32 ISBN 0-582-03639-9
 Publisher **Longman, Harlow, England**
 Avail. from **TALC**
 Key words **pneumonia, child-to-child**
 Abstract **Acute respiratory infections (ARI) - mostly in the form of pneumonia - accounts for millions of deaths in babies and young children because these illnesses have no "simple cure". Children need antibiotics. ARI symptoms are easily recognised, however, and if treatment is given quickly many children can be saved. In this story, Andrew shows us how, when he is left in charge of his baby sister and she develops pneumonia. Fortunately, Andrew knows the signs, so he makes sure that she gets antibiotics and lives.**
 Comments **For students.**

No. 42 Titel **Nutrition and Families**

Author Ritchie, Jean

Editor

Year 1983 Rev. edition Pages 171 ISBN 0-333-35767-1

Publisher Macmillan, London

Avail. from

Key words nutrition

Abstract A beautifully-illustrated and practical manual covering the essential details of good nutrition. The author links the importance of good nutrition with normal healthy child development, and with the health and well-being of the family. The significance of social and economic factors in relation to good nutrition and child welfare are also discussed. The book provides practical advice and ideas for the planning of good diets and the preparation of food, and is written in a clear and readable style. It will be of value to everyone involved in community health and development - in both rural and urban environments - throughout the countries in the tropics.

Comments For teachers. Clear texts and distinct drawings from the african continent.

No. 43 Titel **Nutrition education series Issue 10**

Easy to make teaching aids for nutrition teaching-learning

Author

Editor Barclay, Ellen J

Year 1989 Pages 138 ISBN

Publisher UNESCO

Avail. from

Key words teaching aids

Abstract A selection of easy-to-make classroom teaching aids.

Comments For teachers.

No. 44 Titel **Nutrition for Developing Countries**
 Author King, Felicity.S and Burgess, Ann
 Editor
 Year 1993 Second edition Pages 461 ISBN 0-19-262233-1 (pbk),
 Publisher Oxford University Press, Oxford
 Avail. from TALC
 Key words nutrition
 Abstract *Nutrition for developing countries* is both a textbook of nutrition - covering the essential facts about nutrients, nutrient needs, foods and meals - and at the same time a practical guide for nutrition workers, be they health workers, agricultural workers, home economists, school teachers, or their trainers. It explains in clear simple language and practical detail how nutrition workers can help families with nutrition problems, how to treat malnourished children, and how to work in communities or in schools. This information is not easily available elsewhere, and no other manual covers the subject so comprehensively. The manual is liberally illustrated with many new drawings, as well as some from the first edition. This new edition of a popular and widely-used book brings the subject up-to-date, takes it to a slightly more advanced level, and includes new ideas on working in and with communities and on nutrition education. It includes many ideas for exercises for training nutrition workers. *Nutrition for developing countries* fills the role of the first edition and retains its simple approach, but covers the subject more widely and in greater depth.
 Comments For teachers and reference book. Clear, basic English and well illustrated.

No. 45 Titel **Nutrition Handbook for Community Workers in the Tropics**
 Author
 Editor CFNI
 Year 1986 Pages 211 ISBN 0-333-42607-X
 Publisher Macmillan, Kingston, Jamaica
 Avail. from TALC
 Key words Nutrition
 Abstract Contains important information on discovering a community's food and nutrition situation; working with people in the community; nutrition education; principles of good nutrition; selecting; storing and using foods carefully; preventing and combatting malnutrition; diarrhoea, obesity, diabetes and high blood pressure; nutrition for children and pregnant and breastfeeding women. Examples of planning meals and diets appropriately.
 Comments For teachers. Clear, basic English and explanatory drawings. Handbook for those working in the community to improve nutrition education.

No. 46 Titel **Nutrition Learning Packages**
 Author
 Editor WHO, UNICEF
 Year 1989 Pages 170 ISBN 92-4-154251-9
 Publisher WHO / UNICEF Nutrition Support Programme
 Avail. from WHO, UNICEF
 Key words nutrition, teaching, training
 Abstract Designed to enable trainers to help trainee community health workers develop the skills they need to teach nutrition in the community. Each package contains a selection of materials, such as information sheets and ideas for role-plays and demonstrations, that can be used by trainers with trainees and also by trainees in the community. There is an introductory section for trainers and each package has detailed instructions on how to use the materials contained within it.
 Comments Clear language, distinct drawings.

No. 47 Titel **Partners in Evaluation.**
 Evaluating Development and Community Programmes With Participants
 Author Feuerstein, Marie Thérèse
 Editor
 Year 1986 Pages 196 ISBN 0-333-42261-9
 Publisher Macmillan Publishers, London
 Avail. from TALC
 Key words Evaluation, community development
 Abstract A practical field handbook and a textbook. Designed to help those who want to know more about monitoring and evaluating their own work. The methods, principles and examples it contains can be used in many different types of programmes but they are particularly appropriate to development and community programmes, whether in health, agriculture, adult education, rural or urban development, and craft co-operatives. Many available monitoring and evaluation methods are too complex, too costly and inappropriate to development and community programmes. This book advocates the participation of people at community level in various parts of the evaluation process. It is geared towards technologies which are centered on people working as a team, in partnership with project teachers and managers. This book is written so that it can be used in the field by busy practitioners with little or no formal training in evaluation methodology. In addition, it can be used by students taking such courses. It uses clear and straight forward language, is well-illustrated, and will be equally valuable to those using English as a second language. Above all it is based on years of research, experience and trial by many people in many parts of the world.
 Comments For teachers and reference book.

No. 48 Titel **Personal Transport for Disabled People Design & Manufacture**
 Author **Wyre, Michael**
 Editor
 Year 1984 Pages 80 ISBN 0-907320-11-2
 Publisher
 Avail. from **AHRTAG**
 Key words **disability, transport aids, design, construction, community based rehabilitation**
 Abstract **Designs for the local manufacture of wheelchairs, trolleys and tricycles from all over the world.**
 Comments **Short, simple text,clear illustrations and designs. Practical advise.**

No. 49 Titel **Preventing a crisis**
 Author
 Editor
 Year 1988 Pages 192 ISBN 0-86089-081-3
 Publisher **International Planned Parenthood Federation**
 Avail. from **TALC**
 Key words **HIV, AIDS, teaching, counselling**
 Abstract **Some up-to-date facts, ideas for integrating AIDS prevention into a health program and approaches to prevention.**
 Comments **Reference book**

No. 50 Titel **Primary Child Care A manual for health workers**
 Author **King, Maurice King, Felicity and Martodipoero, Soebagio**
 Editor
 Year 1978 Pages 315 ISBN 0-19-264229-4
 Publisher **Oxford University Press, Oxford**
 Avail. from **TALC**
 Key words **pediatrics, underdeveloped areas, medical care, common diseases**
 Abstract **Directed to all those who can read a book and have few possibilities to send sick children to hospital. In many countries about a quarter of all children die before they are five years old. In some districts half of them die. Many of the living children are sick. We can prevent (stop) much of this disease and death. We can care for children in the way this book describes. It explains how we can prevent them becoming ill, and how we can cure them when they are ill.**
 Comments **Reference book. Comprehensive child care in simple language, well illustrated.**

No. 51 Titel **Primary Health Education.**
 Author Young, Beverly and Durston, Susan
 Editor
 Year 1990 Pages 208 ISBN 0-582-77924-3
 Publisher Longman, Harlow, England
 Avail. from TALC
 Key words teaching, health education, child-to-child
 Abstract Particularly aimed at students training to be teachers although it will also be valuable for practicing teachers. As well as containing useful background knowledge on health matters, there are numerous teaching suggestions showing how health education can be brought to life in the classroom.
 Comments For teachers. Useful as a handbook for preparing lessons with the Child-to-child activity sheets.

No. 52 Titel **Puppets for Better Health. A manual for Community Workers and Teachers.**
 Author Gordon, Gill
 Editor
 Year 1986 Pages 98 ISBN 0-333-39138-1
 Publisher Macmillan, London
 Avail. from TALC
 Key words health education, puppets, child-to-child
 Abstract Describes the contribution that puppets can make to health promotion with examples from the author's experience in northern Ghana. Puppets can give information and increase awareness without embarrassing the health worker or offending the audience. The book describes the special advantages of puppetry for children and their potential for promoting community health through the Child-to-child programme. The importance of community participation is stressed, particularly in developing stories with local people so that they reflect local problems, options and values. Detailed instructions are given for making different types of puppets, props and theatres using local materials and skills. The logistics of preparing for the performance and putting on the show are dealt with. Discussion after the show, follow-up, continuing support and evaluation are described as essential components so that the puppet show is not "just entertainment".
 Comments For teachers.

No. 53 Titel **Reaching Health for All**
 Author **Rohde, Jon Morley, David and Chatterjee, Meera**
 Editor
 Year **1993** Pages 500 ISBN 0195632362
 Publisher **OUP**
 Avail. from **TALC**
 Key words **public health, rural development**
 Abstract **If the process of providing health to people has ever appeared straightforward or non-controversial, this text will be an eye-opener - a journey into a world of human struggle amid poverty and violence, economic and political upheaval. Those familiar with the ups and downs of ensuring basic health care will find the book an invaluable source of information from a wealth of different settings. It gathers together the experience of individual communities, of several nations and some worldwide initiatives to ensure the health of peoples. It looks back at achievements during the 1980s and forward to the year 2000. It chronicles the enthusiastic quest for equity and efficiency in health. It raises questions about the real meaning of "Health for All" based on actual efforts. Modelled on the successful 1983 Oxford publication *Practising Health for All*, this new book brings together 22 case studies, from around the world to illustrate a wide range of approaches as well as problems in the field of public health and development. *Reaching Health for All* will be an invaluable teaching tool in medical colleges, schools of public health and social faculties throughout the world. It will evoke thoughtful responses from policy-makers and planners, community health practitioners and students, development specialists, and those committed to social justice.**

Comments Reference book.

No. 54 Titel **Rural development Putting the Last First**
 Author **Chambers, Robert**
 Editor
 Year **1978** Pages 246 ISBN 0-582-64443-7
 Publisher **Longman, Harlow, England**
 Avail. from **TALC**
 Key words **rural development, rural poor**
 Abstract **The extremes of rural poverty in the Third World are an outrage. Starting with this uncompromising statement, the author challenges preconceptions dominating rural development. The central theme of the book is that rural poverty is often unseen or misperceived by outsiders, those who are not themselves rural and poor. A challenging book for all concerned with rural development.**

Comments Reference book.

No. 55 Titel **Rural Water Supplies and Sanitation**
 A Text from Zimbabwe's Blair Research Laboratory

Author **Morgan, Peter**

Editor **Ministry of Health, Zimbabwe**

Year **1990** Pages **358** ISBN **0-333-48569-6**

Publisher **Macmillan**

Avail. from

Key words **latrines, pumps, sanitation, water**

Abstract **This volume represents over fifteen years of research by the field team of the Blair Research Laboratories supported by the Ministry of Health in Harare, Zimbabwe. The first section is concerned with gaining access to a water supply, and ensuring that it is clean - the essential factor behind good health for all. The second section deals with the actual construction and maintenance of the Blair latrine, and its variants.**

Comments **Reference book. A single, practical manual that will be invaluable to those working in the area of water supply and sanitation and associated health issues.**

No. 56 Titel **Sanitation Without Water. Revised and Enlarged Edition**

Author **Winblad, Uno and Kilima, Wen**

Editor

Year **1986** Pages **161** ISBN **0-333-39140-3**

Publisher **Macmillan, London**

Avail. from **TALC**

Key words **sanitation, water, latrines**

Abstract **This book deals with drop latrines and pour-flush latrines. It has been prepared to meet increasing demands for practical information on how to design, build and operate with limited resources. Primarily intended for health officers, nurses, medical auxiliaries and village health workers. it should also be of relevance to other members of the medical professions and to architects, engineers, physical planners and administrators concerned with appropriate technology.**

Comments **Reference book. Practical information on how to design, build and operate compost and improved pit latrines. Distinct and explanatory illustrations. For higher levels.**

- No. 57 Titel **See How They Grow**
Monitoring Child Growth for Appropriate Health Care in Developing Countries
- Author Morley, David and Woodland, Margaret
- Editor
- Year 1987 Pages 265 ISBN 0-333-41969-3
- Publisher Macmillan
- Avail. from
- Key words growth monitoring, child care
- Abstract **The most important step in improving child health in developing countries is to overcome malnutrition. This book demonstrates how to do this by monitoring growth through the use of simple charts, devised by Professor Morley and modified through field experience gained in many countries. The practical details of completing and interpreting these charts are explained and illustrated. New ideas on the management of conditions that impair growth and subjects associated with growth are discussed in detail. Written in simple English and illustrated with over one hundred and sixty line drawings.**
- Comments Reference book.
-
- No. 58 Titel **Smoking-Third World Alert**
- Author Nath, Uma Ram
- Editor
- Year 1986 Pages 291 ISBN 0-19-261325-1
- Publisher Oxford University Press, Oxford
- Avail. from
- Key words smoking, tobacco
- Abstract Transformation of Papers presented at the Fourth World Conference on Smoking and Health, Stockholm 1979.
- Comments Reference book.
-
- No. 59 Titel **Talking AIDS. A Guide for Community Work.**
- Author Gordon, Gill and Klouda, Tony,
- Editor IPPF
- Year 1988 Pages 98 ISBN 0-333-49781-3
- Publisher Macmillan, London
- Avail. from TALC
- Key words HIV, AIDS, counselling, health education
- Abstract **Material presented in an accessible and thought provoking way. Designed for anyone who is involved in counselling and education about sexual health and AIDS in the community.**
- Comments For teachers. A practical handbook for community workers based on real questions and concerns voiced by people around the world.

- No. 60 Titel **Teaching and Learning with Visual Aids.**
Program for International Training in Health.
Author Fetter, K Clark, M Murphy, J and Walters, J
Editor
Year 1987 Pages 290 ISBN 0-333-44815-4
Publisher Macmillan, London
Avail. from TALC
Key words teaching, visual aids.
Abstract Is written for community health workers and nutrition counsellors, traditional birth attendants, family planning counsellors and workers, community and rural development workers, adult education and extension students and teachers generally. Covers the "why, when and how" of visual aids. No previous knowledge or skills in art or visual aids are required and the level of English used can also be understood by those for whom it is a second language.
Comments For teachers.
- No. 61 Titel **Teaching for better learning** A guide for teachers of primary health care staff
Author Abbatt, F.R.
Editor
Year 1992 2nd edition Pages 190 ISBN 92-4-154442-2
Publisher WHO
Avail. from WHO, Geneva
Key words allied health personnel-education, teaching methods
Abstract This manual explains the basic principles of teaching and describes the different teaching methods that are currently in use. It is divided into four parts: deciding what the students should learn, choosing and using suitable teaching methods, assessing the students, and preparing appropriate teaching materials and manuals. Throughout the manual, the author emphasizes the importance of training students to apply the relevant skills and knowledge rather than simply to know facts. Written in nontechnical language.
Comments Reference book.
- No. 62 Titel **Teaching Thomas.** Child to child readers. Level 2.
Author Lowe, Keith
Editor
Year 1985 Pages 48 ISBN 0-582-89512-X
Publisher Longman, Harlow, England
Avail. from TALC
Key words child health, child development, child-to-child
Abstract A young boy is given responsibility and rewards for helping his baby brother learn to walk, talk, count and play. The book encourages children to concern themselves with the development of their pre-school brothers and sisters and shows the importance of such help.
Comments For students.

No. 63 Titel **Toys for fun** a book of toys for pre-school children
 Author Martin, Jan
 Editor
 Year 1988 Pages 64 ISBN 0-333-46704-3
 Publisher Macmillan Publishers, London
 Avail. from TALC
 Key words toys, child-to-child
 Abstract Plays and toys are of great importance in the development of younger children. *Toys for fun* shows, through detailed illustrations, how toys can be made from readily-available and inexpensive materials using uncomplicated methods. All the toys described are attractive, stimulating and fun. The book contains a brief explanatory introduction in English, Swahili, Arabic, French, Portuguese and Spanish. *Toys for fun* is principally for play group leaders and nursery school teachers, but it can also be used in primary school art and craft classes to teach school children how to make useful toys for younger brothers and sisters. In the same way, the book would suit adult education classes, and vocational classes in arts and crafts.
 Comments For teachers and students.

No. 64 Titel **Uganda Essential Drug Manual**
 Author
 Editor Ministry of Health, Uganda
 Year 1986 Pages 118 ISBN
 Publisher Ministry of Health, Danish Red Cross, UNICEF, Uganda
 Avail. from
 Key words Essential drugs, common diseases, prevention
 Abstract
 Comments For teachers and students at higher levels. Clear illustrations and explanations about the most common diseases. Adopted to the reality of Uganda.

No. 65 Titel **We Can Play and Move.**
 Author Levitt, Sophie
 Editor
 Year 1987 Pages 60 ISBN
 Publisher London
 Avail. from AHRTAG TALC
 Key words disability, rehabilitation, community based rehabilitation
 Abstract For disabled children to learn to move by playing with others, particularly with other children. For elder children, to help them play with any babies and younger children that they take care of. Shows play activities. Little text, mainly drawings.
 Comments For students and teachers.

No. 66 Titel **Where There Is No Dentist**
 Author Dickson, Murray
 Editor
 Year 1987 Pages 188 ISBN 0-942364-05-8
 Publisher Hesperian Foundation, Palo Alto, California , USA
 Avail. from TALC TAPS
 Key words teeth, dental care
 Abstract A companion volume to the village health care handbook *Where There Is No Doctor*. Together, the books encourage people to take the lead in caring for their own health. This approach to health care implies respect for the dignity of all persons, as well as confidence in their resourcefulness. Village health workers can use this book to help people care for their teeth and gums. Health workers begin with the felt needs of the people - treating the dental problems they have now. Then they work to prevent the same problems from returning. Thus *Where There Is No Dentist* shows how to diagnose and treat dental problems and also suggests new ways of work for better dental health in the community.
 Comments For teachers and reference book. Excellent and well illustrated.

No. 67 Titel **Where There Is No Doctor** A village health care handbook
 Author Werner, David
 Editor
 Year 1987 Pages 401 ISBN 0-333-26258-1
 Publisher Macmillan Publishers, London
 Avail. from TALC
 Key words underdeveloped areas, medical care
 Abstract More than a book on first aid. It covers a wide range of things that affect the health of the villager - from diarrhoea to tuberculosis, from helpful and harmful home remedies to the cautious use of certain modern medicines. Special importance is placed on cleanliness, a healthy diet, and vaccinations. The book also covers in detail both childbirth and family planning. Not only does it help the reader realize what he can do for himself, but it helps him recognize which problems need the attention of an experienced health worker. This book is for the teacher in a rural school. The book will help him give practical advice and care to the sick and injured. It also gives guidelines for teaching children and adults in his community about the problems of health, cleanliness, and nutrition.
 Comments For teachers, and for students as reference book. Simple language and many explanatory drawings.

Books recommended for teachers.

All for Health A resource book for Facts for Life

Child-to-Child. A Resource Book

Facts for Life

Happy Healthy Children. A child care book.

Health Care Together.

Health into Mathematics. Health across the curriculum.

Healthy Living Healthy Loving.

Helping Health Workers Learn

How to make Simple Disability Aids

Know your Body. Structure, function and development - for community health education

Learning about AIDS A manual for pastors and teachers

Nutrition and Families

Nutrition education series Issue 10

Nutrition for Developing Countries

Partners in Evaluation.

Primary Health Education.

Puppets for Better Health. A manual for Community Workers and Teachers.

Talking AIDS. A Guide for Community Work.

Teaching and Learning with Visual Aids.

Where There Is No Doctor A village health care handbook

Books recommended for students.

Health Education. Pupil's book. Basic Primary Science & Health for Uganda.

Healthy Living Healthy Loving.

How to make Simple Disability Aids

Know your Body. Structure, function and development - for community health education

Toys for fun a book of toys for pre-school children

We Can Play and Move.

Short readers for students to read on their own.

Accidents. Child to child readers. Level 1.

Dirty Water. Child to child readers. Level 1.

Good Food. Child to child readers. Level 1.

Not Just a Cold. Child to child readers. Level 1.

A Simple Cure. Child to child readers. Level 2.

Diseases Defeated. Child to child readers. Level 2.

Down with Fever. Child to child readers. Level 2.

Flies. Child to child readers. Level 2.

I Can Do It Too. Child to child readers. Level 2.

Teaching Thomas. Child to child readers. Level 2.

Deadly Habits. Child to child readers. Level 3.

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Ipoh, Perak Darul Ridzuan

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Preface

A challenge to the teacher
A challenge to the curriculum writer
A challenge to the exam writer

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How to use this book

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Introduction

The health priorities
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PART A Health into mathematics

1 Statistics and health

Primary level 11

HEALTH ACTIVITIES

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THE MATERIALS



The Child-to-Child Activity Sheets contain vital health messages and suggested activities for their reinforcement. The following titles showing the scope and diversity of Child-to-Child activities are available and distributed free of charge to educators worldwide. There are translations in twelve languages.

1. CHILD GROWTH AND DEVELOPMENT

- 1.1 Playing with Younger Children
- 1.2 Toys and Games for Young Children
- 1.3 Understanding Children's Feelings
- 1.4 Helping Children Who Do Not Go to School
- 1.5 A Place to Play
- 1.6 Playing with Babies

2. NUTRITION

- 2.1 Feeding Young Children: Healthy Food
- 2.2 Feeding Young Children: How Do We Know if They are Getting Enough to Eat?

3. PERSONAL AND COMMUNITY HYGIENE

- 3.1 Our Teeth
- 3.2 Looking after our Eyes
- 3.3 Children's Stools and Hygiene
- 3.4 Clean, Safe Water
- 3.5 Our Neighbourhood

4. SAFETY

- 4.1 Preventing Accidents
- 4.2 Road Safety

5. RECOGNISING AND HELPING THE DISABLED

- 5.1 Children with Disabilities
- 5.2 Let's Find out How Well Children See and Hear
- 5.3 Helping Children who Cannot Hear Well

6. PREVENTION AND CURE OF DISEASE

- 6.1 Caring for Children with Diarrhoea
- 6.2 Caring for Children Who Are Sick
- 6.3 Worms
- 6.4 Immunisation

ooking - Think for Yourself
oughs, Colds, Pneumonia
alaria

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STORY BOOKS

Eleven graded readers, containing simple but powerful health messages in an enjoyable story format, develop reading skills while teaching the children health messages of vital relevance to themselves and their communities. There are translations in eight languages.

'TOYS FOR FUN' - A TOY MAKING GUIDE

A guide to making toys from low-cost or free materials with an introduction in six languages.

OTHER MATERIAL

Annual Newsletter for worldwide distribution. Resource books and booklets for teachers, health workers and planners and organisers of projects, including those with refugee children.

MOST MATERIALS ARE COPYRIGHT FREE

THE CHILD-TO-CHILD TRUST



The Child-to-Child Trust is based in London University. It brings together experts from the Institutes of Child Health and Education of the University of London. The roles of the London office are:

- to design and distribute health education materials;
- to advise and assist in the implementation and evaluation of Child-to-Child projects;
- to coordinate a worldwide information network on projects using the Child-to-Child approach.

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**Child-to-Child, Room 632,
Institute of Education,
20 Bedford Way, London WC1H 0AL England**

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Registered Charity Number 327654

The Child-to-Child Trust





CHILD-to-child Readers

The authors of these stories have lived and worked in countries around the world, in India, Uganda, Nigeria and Indonesia. They have had a great deal of experience in the fields of child education and child health and are all members of the Child-to-Child programme.

The publishers acknowledge assistance received in the production of this book from MISEREOR—German Catholic Bishops Episcopal Organization for Development Co-operation.

The CHILD-to-child Primary Health Readers have been developed to teach and encourage primary school children in Africa to become concerned with the health and general development of their pre-school brothers and sisters. Each book has been written by an experienced educationalist in conjunction with a panel of medical and language specialists. The books have been graded into three reading levels, and each deals with a different health topic of relevance to children in Africa.

The Readers can be used as an integral part of a primary Science, Social Studies, Environmental Science, Home Economics or Health Science curriculum.

This Reader tries to show how children can help to improve their environment by fighting flies which carry disease.

The story follows the fortunes of five evil spirits—Fever, Fury, Filth, Fall and Fear—who have cooked up a recipe guaranteed to create trouble in the form of small, fast-breeding flies. One by one, they are defeated by clever children who have the power to destroy them by applying their knowledge of hygiene which they share with others.

Other books in the series:

<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>
Dirty Water	Down with Fever	Deadly Habits
Good Food	A Simple Cure	
Accidents	I Can Do It Too	
Not Just a Cold	Diseases Defeated	
	Teaching Thomas	

ISBN 0 582 03649 6

Longman

Child-to-Child

Activity Sheet 3.3

Child-to-Child Activity Sheets are a resource for teachers, and health and community workers. They are designed to help children understand how to improve health in other children, their families, and their communities. Topics chosen are important for community health and suit the age, interests and experience of children. The text, ideas and activities may be freely adapted to suit local conditions.



CHILDREN'S STOOLS AND HYGIENE

THE IDEA

Diarrhoea, typhoid, cholera, polio and some other diseases are caused by germs present in stools. These germs can pass from one person to another on the hands, in dust, in food and drinks, and on flies. Getting rid of stools in a safe way, and washing after defaecation and before eating can help prevent the spread of these diseases.

Diarrhoea is Dangerous

Children have diarrhoea when they pass frequent, watery stools. They may also vomit and have a swollen belly with cramps. Diarrhoea is caused by germs which live in dust, stale food, dirty water, and human stools. Through the diarrhoea, the body tries to 'wash out' the bad germs.

Diarrhoea is a frequent cause of death in young children. They die from dehydration when they lose large amounts of fluid (water and salt) from their bodies because of the diarrhoea and this is not replaced.

How to tell when a child is dehydrated and how to prepare a Special Drink to replace fluids lost is described in Sheet No. 6.1, *Caring for Children with Diarrhoea*. Diarrhoea can often be prevented by proper feeding (see Sheet No. 2.1, *Feeding Young Children: Healthy Food*). But the most important way we can help to prevent diarrhoea and other dangerous diseases is by keeping ourselves, and the places where we live and play, clean.

For further information, please contact:
Child-to-Child, Institute of Education, University of
London, 20 Bedford Way, London WC1H 0AL, U.K.



Stools are Dangerous

Many people know that stools are dirty, but they may not know that the germs in stools can cause diseases. Diarrhoea, worms, cholera, typhoid and polio are spread when germs are passed from our stools to hands and clothes, to the water we drink and the food we eat, making us ill.

By being careful when we pass stools, by keeping our hands and bodies clean after a bowel movement, and by cleaning up any stools which are dropped in places where we live and play, we can help to prevent the germs that cause these diseases from spreading. Animal stools are also dangerous.

WHAT IS AMREF?

The African Medical and Research Foundation (AMREF) is an independent non-profit organization which has been working for more than 30 years to improve the health of the people in eastern Africa, mostly in Kenya, Tanzania and Uganda, as well as in Ethiopia, Somalia and southern Sudan.

It was founded in 1957 by three surgeons—Sir Archibald McIndoe, a New Zealander, Dr Tom Rees, an American, and Sir Michael Wood, a Briton who was the Foundation's Director General until the end of 1985.

AMREF's overall goal is to identify health needs and develop, implement and evaluate methods and programmes to meet those needs through service, training and research. AMREF runs a wide variety of innovative projects with an emphasis on appropriate low-cost health care for people in rural areas. Project funds come from government and non-government aid agencies in Africa, Europe and North America as well as from private donors. The Foundation has official relations with the World Health Organization (WHO), UNICEF and UNDP.

AMREF's current programme includes:

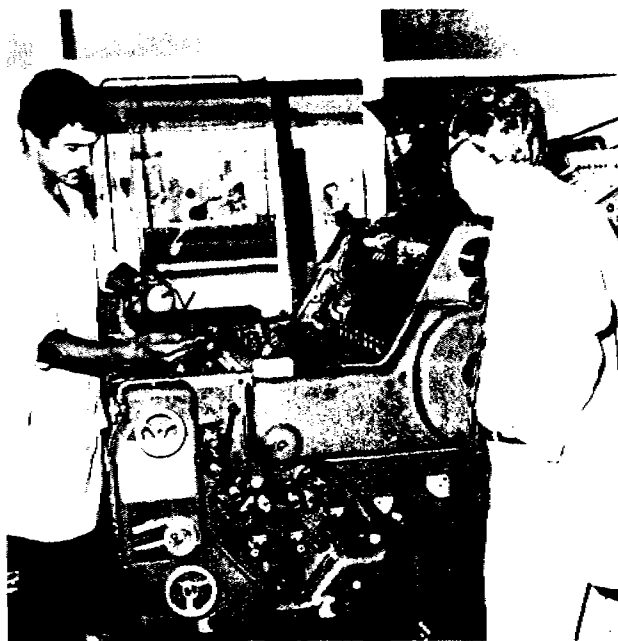
- Primary health care and the training of community health workers
- Training of rural health staff through continuing education, teacher training and correspondence courses
- Development, printing and distribution of training manuals, medical journals and health education materials
- Application of behavioural and social sciences to health improvement
- Airborne support for remote health facilities, including surgical, medical and public health services
- Ground mobile health services for nomadic pastoralists
- Medical radio communication with more than 100 two-way radio stations
- Medical research into the control of hydatid disease, malaria and sleeping sickness
- Maintenance and repair of medical equipment
- Health project development, planning and evaluation
- Consultancy services in the programme areas mentioned above.

AMREF now employs over 600 staff in Africa and is running more than 40 separate health projects including the well known Flying Doctor Service.

To meet the growing demand on its services, AMREF has to raise more than KShs 144 million (US\$9 million) in 1987. To achieve this target AMREF has offices in a number of countries (Canada, Denmark, France, West Germany, The Netherlands, Sweden, UK, USA) to help with the fund-raising, liaise with governments, recruit staff and circulate information about its vital work. AMREF has field offices in Dar es Salaam, Tanzania and Kampala, Uganda.

Produced for the Community Based Health Care Support Unit
by the Technical Information Unit of AMREF

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With national self-reliance as their goal, major concerns of HLM project managers focus on the need for imaginative, well justified proposals for funding project activities; a more businesslike approach to cost-accounting, advertisement and sale of materials to prepare for national self-reliance; and the establishment of intercountry HLM networks to allow the free exchange of materials, experience, expertise and training facilities amongst participating countries.

Although several of the well established national projects are actively producing materials, they are not yet able to manage without external funds. WHO is developing guidelines and mechanisms for the independent operation of national HLM projects. The role of WHO in the HLM Programme has been crucial in helping countries to develop their projects.

The WHO Geneva Interregional clearinghouse:

- assists national HLM projects in medium-term planning and in obtaining external funds;
- provides "seed money" for new projects, staff study travel, local surveys and workshops, until external funds received;
- promotes and identifies donors for intercountry HLM networks to help countries pool their resources;
- develops and distributes guidelines on common problem areas (e.g. funding proposals, design and production of manuals, field testing of HLM with target users);
- collects and disseminates appropriate learning materials for adaptation to different country situations.

WHO Regional Clearinghouses are planned to service both national and intercountry networks, with a WHO Eastern Mediterranean Region clearinghouse already in operation since 1987. At country level, the HLM Programme acts as a catalyst in improving the quality and relevance of staff training and in influencing community behaviour through effective health promotion.

Funds are needed for HLM activities at global, regional, intercountry and national levels to maintain the impetus of the Programme.

For further information contact:

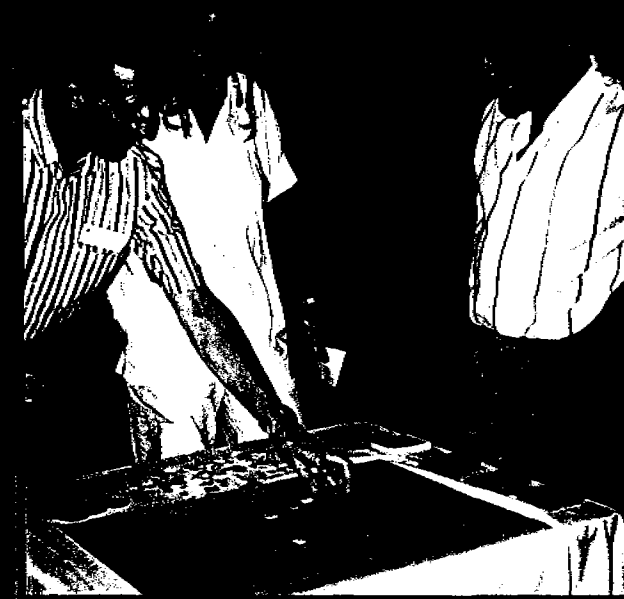
Division of Health Manpower Development
World Health Organization
Avenue Appia
CH- 1211 Geneva 27, Switzerland



WORLD HEALTH ORGANIZATION

UNITED NATIONS DEVELOPMENT PROGRAMME

HEALTH LEARNING MATERIALS



DIVISION OF
HEALTH MANPOWER DEVELOPMENT
Health Learning Materials Programme

WHO/UNDP Joint Venture

An Interregional Health Learning Materials Programme

Primary Health Care

Much of the disease and ill health in the world today stems from conditions that can be prevented or readily treated. Since the Alma-Ata Conference in 1978, all countries have adopted Primary Health Care (PHC) as the means to achieve the social goal of *Health for All by the Year 2000*. PHC as an approach:

- stresses preventive rather than curative care;
- relies on self-help, community participation and appropriate technology for the delivery of health care;
- is broad-based, mobilizing human and material resources in all sectors and at all levels.

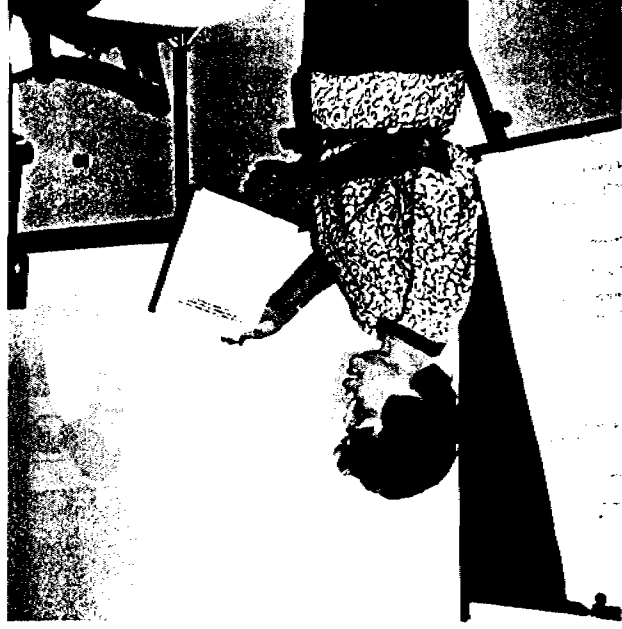
The emphasis of PHC activities of Member States and WHO is on the *district health system*. The "district" is a manageable unit: small enough to identify the health needs and socio-economic problems of communities; large enough to develop the full range of management resources needed for intersectoral action.



Tools for Teaching and Training

Training and information for all those involved in PHC activities is essential—doctors, nurses, community health workers, school teachers, community leaders, rural development officers, as well as individuals and families in the community.

To be effective, training must be supported by locally relevant training and information materials (manuals, brochures, posters, audiovisual aids). These materials must reflect national health priorities, as well as the language and educational levels of the users. There is a desperate shortage of such materials throughout the developing world.



To remedy this shortage of materials at country level, the Interregional Health Learning Materials (IHM) Programme was set up in 1981 by WHO and UNDP. Its aims are to:

- help developing countries achieve self-reliance in the design and production of teaching, learning and health promotion materials in support to PHC;
 - promote the creation of intercountry networks of participating countries to pool resources and exchange materials and experience.
- External funds are needed for the first years of operation of each national IHLM project, until each project is absorbed financially into the national health or education infrastructure.

Strong interest from countries and donors confirms that the Programme is meeting a real need. IHLM projects are already underway in twenty developing countries.





TALC

Teaching-aids At Low Cost.

Address : P.O. Box 49,
St. Albans,
Herts. AL1 4AX, U.K.

Telephone : (0)727 53869

Fax. : (0)727 46852

Books, Slides and Accessories Lists

Books

Books chosen are those that are low-cost, appropriate and not easily available in bookshops. *We must emphasise that no books other than those listed below can be supplied from TALC.* Free material sent as available but only when books are ordered.

* New in 1993.

HEALTH CARE SERVICES

District Health Care: *R. Amonoo-Lartson, G.J. Ebrahim, H.J. Lovel, J.P. Ranken* - Intended for those involved in planning, administration and evaluation of health services at the district level.

Health Service Management: *edited by Kanani, Maneno & Schuter* - How to improve training by using workshops, with a modular approach.

Immunization in Practice: A practical training manual for health workers who give vaccines and for their trainers. In simple English it describes the process and how to carry out tasks.

My Name is Today: *D. Morley & H. Lovel* - Examines the economic, social, political, environmental and human causes of poor health in a clear and stimulating style. Also in French.

Partners in Evaluation: *M.-T. Feuerstein* - Basic principles of evaluation of any project or programme including management in community development, adult education etc. Also in Portuguese.

Primary Health Care Reorienting Organisational Support: *Edited by G.J. Ebrahim and J.P. Ranken* - for students and teachers concerned with administrating, planning or delivering health services.

Primary Health Education: *Beverly Young* - How to teach health education in the classroom. Ideal for teachers and student teachers especially in primary schools.

* **Reaching Health for All:** *edited by J. Rohde, M. Chatterjee & D. Morley* - This book brings together 22 case studies from around the world to illustrate a wide range of approaches as well as problems in public health and development.

Rural Development; Putting the Last First: *Robert Chambers* - Describes why we all fail to reach the very poor and those who need help most.

Rural Water Supplies and Sanitation: *Peter Morgan* - A single, practical manual that will be invaluable to those working in the area of water supply and sanitation and associated health issues.

Sanitation Without Water: *Winblad, Kilama* - Practical information on how to design, build and operate compost and improved pit latrines.

* **Setting up Community Health Programmes:** *Ted Lankester* - A practical manual following a logical progression from before the programme starts through to running particular programmes and subsequent evaluation.

A.I.D.S. EDUCATION & COMMUNICATION

The AIDS Handbook: *J. Hubley* - For those involved in AIDS education & community work, it covers origins, symptoms, transmission and counselling.

Preventing a Crisis AIDS and Family Planning Work: *G. Gordon and A. Klouda* - Some up-to-date facts, ideas for integrating AIDS prevention into a health programme and approaches to prevention. Also in French & Arabic.

Talking AIDS: *G. Gordon and A. Klouda* - A practical handbook for community workers based on real questions and concerns voiced by people around the world. Also available in French and Arabic.

* **Strategies for Hope: Series editor Glen Williams** - A series of case study booklets and video programmes which aims to promote informed, positive thinking and practical action. No 1 From Fear to Hope. No 2 Living Positively With AIDS, No 3 AIDS Management, No 4 Meeting AIDS with Compassion, No 5 AIDS Orphans, No 6 The Caring Community, No 7 All Against AIDS. Booklets 1 to 6 also in French.

* **Strategies for Hope Videos:** 1. TASO Living Positively with AIDS. 2. The Orphan Generation. Both videos are in English (Pal & NTSC) and in French (Pal, SECAM & NTSC). The TASO video is also in Portuguese (Pal). Send for leaflet giving more details.

Other AIDS related materials: sets of slides on HIV and Sexually Transmitted Diseases (See slide section - HIVc, HIVe, HIVp, HIVv and STR), flannelgraph on Family planning, STDs and AIDS and 1-4-1 AIDS Game (see Accessories on back page).

MOTHER AND CHILD CARE

Family Planning Clinic in Africa: *Richard and Judith Brown* - A new edition of this practical book for nurses, medical assistants and auxiliaries with information on setting up and running a contraception clinic.

Healthy Mothers, Happy Babies: *J Hampton & J Cleves Mosse* - Health problems in pregnancy and birth for mothers-to-be and community health workers.

Maternal & Child Health in Practice: *G.J. Ebrahim* - A complete course of training modules for middle level health workers.

Paediatric Practice in Developing Countries: *G.J. Ebrahim* - Intended for the District Officer who has to provide a comprehensive child care service for the district population.

Practical Care of Sick Children: *P. Dean and G.J. Ebrahim* - A practical handbook aimed at nurses, medical assistants and physicians, who have little or no training with sick children.

Primary Child Care Book One: *Maurice and Felicity King* - Comprehensive child care in simple language, well illustrated (see slide list for a matching slide set). Also in Portuguese.

* **State of the Worlds Children 1993:** *UNICEF* Describes what it would take to meet the basic needs of all children.

A Village Struggles for Eye Health: *E. Sutter, A. Foster, V. Francis* - The story of Hanyane is an excellent primer for village community development using eye health as an example.

Where There is No Dentist: *Murray Dickson* - Excellent and well illustrated. Essential for all health workers who look into patients mouths! Also in Portuguese.

Where There is No Doctor: *David Werner* - Highly practical, many illustrations. A must for those developing village programmes. Also in Arabic, Portuguese, Spanish, and an African edition in English. "How to use Where There is no Doctor" is available in Portuguese only.

NUTRITION AND CHILD GROWTH

Helping Mothers to Breast Feed: *F. Savage King* - Up-to-date ideas about breast feeding giving health workers practical guidance on how to prevent problems. Also in Arabic, French & Spanish.

Manual on Feeding Infants and Young Children: *Cameron and Hofvander* - A new edition completely re-written in 1990, simple and practical. Also in Spanish.

* **Nutrition for Developing Countries:** *F. Savage King & A. Burgess* - This new edition brings the subject up-to-date and to a slightly more advanced level, while retaining its simple approach.

Nutrition Handbook for Community Workers: *CFNI* - Working within the community to improve nutrition education.

EDUCATION & COMMUNICATION

Child-to-child Readers: For teaching reading and about health simultaneously. 1. Dirty Water, 2. Good Food, 3. Accidents, 7. Not Just a Cold, (Easy level 1 readers), 4. A Simple Cure, 5. Teaching Thomas, 6. Down with Fever, 8. Diseases Defeated, 9. Flies, 10. I Can Do It Too, (Level 2), 11. Deadly Habits (Level 3). Numbers 3, 4, 8 and 10, "Le vieux roi et la petite fiancée", "La fièvre du lion", "L'Hyène aux Yeux de Poulet" and "La Revanche de Sanko-le-Lièvre" are available in French. Numbers 1 to 10 in Arabic and numbers 1 to 6 in Spanish.

Child-to-child Activity Sheets: Increasing pack size forces charge but a few sample sheets may be sent free on request.

* **Child-to-Child. A Resource Book:** *edited by G. Bonati & H. Hawes* - This book includes all the activity sheets, plus "Approaches to Learning and Teaching", "Doing it Better" and "How to Run a Workshop".

Facts for Life: *UNICEF* - A challenge to communicators of all kinds.

Health Care Together: *edited by M. Johnstone and S. Rifkin* - Training exercises for health workers in community based programmes. Designed to develop communication skills and teaching methods.

Health into Maths: Shows teachers in primary schools how to combine teaching health education and maths.

Helping Health Workers Learn: *David Werner* - Describing how to teach village health workers. Also in Portuguese and Spanish.

Puppets for Better Health: *Gill Gordon* - Now available at a much reduced price, this book shows how to make puppets, props and theatres and use them in teaching at community level.

Simple English is Better English: *Felicity Savage* - For those concerned with the need to communicate effectively; helps you to consider the English you use.

Teaching and Learning with Visual Aids: *INTRAH* - Covers the "why, when and how" of visual aids with examples. For trainers generally.

Teaching Health-care Workers: *Fred Abbatt and Rosemary McMahon* - A simply written, well illustrated detailed guide for the teachers of health care workers.

Toys for Fun: *Edited by June Carlile* - A book of toys for pre-school children in English, French, Portuguese, Spanish, Swahili and Arabic all in one volume. Many illustrations.

Training Manual for Traditional Birth Attendants: *Compiled by Gill Gordon* - This book is a storehouse of facts and information which can be adapted to meet the needs of trainers and TBA's.



TALC

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Herts. AL1 4AX, U.K.
Telephone : (0)727 53869
Fax. : (0)727 46852

PRICE LIST

If a book is available in more than one language, please clearly circle the one you require.

BOOKS

	Price	Quantity	£ p
Aches and Pains	1.50		
AIDS Handbook	3.60		
Alternative Limb Making	4.00		
Care of the Critically Ill Patient	5.90		
Child-to-Child Readers 1,2,3 and 7 (£1.15 each)	4.60		
Child-to-Child Readers 4,5,6,8,9,10,11 (£1.30 each)	9.10		
Child-to-Child Readers 3,4,8,10 plus 4 French (£1.50)	12.00		
Child-to-Child Readers 1,2,4,5,6,8,9,10 Arabic (£1.50)	12.00		
Child-to-Child Readers 1,2,3,4,5,6 Spanish (£1 each)	6.00		
Child-to-Child Activity Pack. English or Spanish	2.00		
Child-to-Child Resource Book	5.00		
Clinical Tuberculosis	3.00		
Common Medical Problems	5.90		
Disabled Village Children English, French or Spanish	6.00		
District Health Care. ELBS	2.20		
Eye Diseases in Hot Climates	3.50		
Facts for Life English, Arabic, Portuguese, Spanish	1.00		
Family Planning Clinic in Africa.	2.10		
Health Care Together	3.60		
Health into Maths	3.90		
Health Service Management	4.00		
Healthy Mothers, Happy Babies	3.50		
Helping Health Workers Learn. English or Spanish	5.50		
Helping Health Workers Learn. Portuguese	7.00		
Helping Mothers to Breastfeed. English or French	1.50		
Helping Mothers to Breastfeed. Arabic	3.50		
Helping Mothers to Breastfeed. Portuguese	4.90		
Helping Mothers to Breastfeed. Spanish	2.50		
How to Choose and Make a Cold Box	5.00		
How to Look After a Health Centre Store	5.00		
How to Look After a Refrigerator	5.00		
How to Make Simple Disability Aids	2.50		
Immunization in Practice	3.95		
Insensitive Feet	Free		
Manual on Feeding Infants. English or Spanish	6.00		
Maternal and Child Health in Practice	3.25		
Medical Administration	5.00		
My Name is Today. English or French	2.60		
Nutrition for Developing Countries	3.95		
Nutrition Handbook for Community Workers	4.00		
Obstetric Emergencies.	1.25		
Total of this Column			

English out of print

	Price	Quantity	£ p
Paediatric Practice in Developing Countries ELBS	5.00		
Partners in Evaluation.	2.70		
Partners in Evaluation. Portuguese	3.50		
Personal Transport	2.50		
Practical Care of Sick Children	3.90		
Practical Guide to Diag./Treatment of Leprosy	Free		
Preventing a Crisis. English or French or Arabic	2.70		
Primary Anaesthesia ELBS	2.50		
Primary Child Care Book 1. English or Portuguese	5.95		
Primary Health Care Reorienting Org. Support	2.90		
Primary Health Education	5.20		
Primary Surgery Vol.1. Non-Trauma	9.50		
Primary Surgery Vol.2. Trauma	8.00		
Puppets for Better Health	3.80		
Reaching Health for All	5.50		
Rural Development	2.25		
Rural Water Supplies & Sanitation	4.95		
Sanitation Without Water	3.95		
Setting up Community Health Programmes	5.95		
Simple English is Better English	Free		
State of the World's Children	2.50		
Strategies for Hope. Books 1 to 3 English (£1.50)	4.50		
Strategies for Hope. Books 4 to 7 English (£1.50)	6.00		
Strategies for Hope. Books 1 to 6 French (1.50)	9.00		
Talking AIDS. English or French or Arabic	1.60		
Teaching and Learning with Visual Aids	4.50		
Teaching Health Care Workers	4.50		
Toys for Fun	1.30		
Training Manual for Traditional Birth Attendants	4.75		
Village Struggles for Eye Health (Hanyane)	3.75		
We Can Play and Move. English or Arabic	2.50		
Where There is no Dentist. English or Portuguese	3.00		
Where There is no Doctor. English	3.50		
Where There is no Doctor. English for Africa	3.50		
Where There is no Doctor. Arabic or Portuguese	5.50		
Where There is no Doctor. Spanish	5.20		
Como usar Onde nao ha Medico Portuguese	2.50		
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Out of print
NR April 1993

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(Second Class UK or Surface Mail)
OR Air Speeded Post (ASP) 60%
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Total for Books

All prices are subject to variation without notice
ELBS books can only be supplied to developing countries.

SLIDES

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AmP	<input type="checkbox"/>	DnPd	<input type="checkbox"/>	LpN	<input type="checkbox"/>	PsE	<input type="checkbox"/>
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DhM	<input type="checkbox"/>	Lp	<input type="checkbox"/>	Pln †	<input type="checkbox"/>		<input type="checkbox"/>

Please enter the number of sets required in the appropriate boxes and ALSO tick the box below to indicate how you would like your slides

SELF MOUNTING SETS:

£4.80 (£3.80)* for 24 slides and script.

MOUNTED SETS:

£6.50 (£5.50)* for 24 slides and script.

MOUNTED IN PLASTIC FILE

OR FILE BAR: PCa-j £88

£11.00 for 24 slides and script.

SLIDE/TAPE SET:

£16.00 for 24 slides and script and tape. PCa-j £128

*Developing country price.

AIRMAIL POSTAGE : Slides only

Prices listed cover packing and surface postage only. For airmail postage of mounted or unmounted slides add 90p per 24 slide set and for sets with files or tapes add £1.50 per 24 slide set.

	Price	Quantity	£ p
Total cost of slides			
Airmail postage			
VAT 17.5% for all items sent to E.E.C. addresses			
TOTAL FOR SLIDES			

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Please pay with Order or against Proforma Invoice by one of the following methods:

U.K.: By Sterling cheque or Postal Order.

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Please make CHEQUES payable to TALC

ACCESSORIES

	Price	Quantity	£ p
Pre- School Plastic Scale Kit <i>English, Arabic, French, Portuguese, Spanish</i> Discounts: 5 kits or more 10% 50 kits or more 20%	15.00		
Child Health Charts (No VAT) <i>English, Arabic, French, Portuguese, Spanish, Zulu</i> Discounts: over 500 charts 40% over 5000 charts 45% over 10000 charts 50%			.24
Charts on white card (for printing use) per pair <i>English, Arabic, French, Portuguese, Spanish</i>			2.50
Child Health Growth Chart Flannelgraph			7.00
Family Planning STD's & AIDS Flannelgraph			19.50
Nutrition and Child Health Flannelgraph			21.50
Worm Flannelgraph			21.50
Weight for Height Chart Coloured <i>French, Portuguese, Spanish or blank</i> Black & White (English only)			4.50
			1.50
Sugar and Salt Measures <i>English, Arabic, Chinese, French, Portuguese or Spanish</i> Discounts: over 500 spoons 20% over 1000 spoons 40% over 5000 spoons 45%			.16
Insertion Tape			.25
Discount: over 500 tapes 10% Discount: over 1000 tapes 20%			
1-4-1 AIDS Game			2.50
TALC Baby , <i>English, Arabic, French, Portuguese, Spanish</i>			Free
Total			
30% postage and packing (surface)			
60% postage and packing air mail			
17.5% VAT (see note below)			
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If converting to US dollars please ensure that, when you have made the calculation, the number of dollars is nearly twice the number of pounds required.

VAT:

This is a European tax payable on all orders delivered to E.E.C. addresses with the exception of books and "Child Health" Charts. It is also payable on Postage and Packing charges. If you are a visitor to Europe you may have your goods sent direct to your overseas address without payment of VAT.

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- ObTw **Twin Pregnancy and Labour:** Covers the common problems in the delivery of twins. (DN) 1981
- OnC **Onchocerciasis:** River blindness, how it arises and may be prevented. (DN) 1978
- Ost **Obesity in Childhood:** Causes, diagnosis, management and prevention in Britain but relevant elsewhere. (DN) 1989
- PCa-j **Primary Child Care:** 10 sets of slides for use with the "Primary Child Care" Book. Covers most common childhood conditions. (240 slides, eight times the price.) (Fr) (DNA) 1979
- PED **Protein Energy Deficiency - Signs and causes:** This set of new slides replaces Pcd (DNA) 1990
- PhW **Physiology of Women:** Conception and pregnancy in simple diagrams. (NAO) 1975
- Pln **Planning Urban Community Health:** Assesses the health problems of a slum community and plans improvements with that community. (48 slides, double the price). (AO) 1987
- PsA **Playgroups for preschool children in Africa:** The value of supervised play for 3-6 year olds; how to make low cost play materials from natural objects and junk. (NASO) 1985
- PsE **Preschool development in Asia:** How to provide a stimulating environment for 3-6 year olds. Parents make low cost toys from local materials. (NASO) 1985
- ScH **Schools - a Resource for Primary Health Care:** How school children become involved in practical health and in the local village programme in South India. (DNASO) 1985
- Sk **Common Skin Diseases of Children in the Tropics:** Diagnosis and management. (DNA) 1970
- SkT **Skin Diseases in Temperate Zones:** Common conditions in the U.K. (DN) 1974
- SPG **The Social Aspects of Population Growth:** Discusses people's decisions on their fertility and the impact of advice and publicity. (DNA) 1990
- StD **Schistosomiasis and intestinal helminths: microscopic diagnosis:** Simple techniques for rapid quantitative diagnosis of major helminth infections. (DNA) 1985
- STr **Sexually Transmitted Diseases: Recognition and Treatment.** Designed for use with the HIV sets or on its own. (DNA 1990)
- TbNH **Natural History of Childhood Tuberculosis:** The characteristics of childhood T.B. (D) 1975
- TbP **Pathology of Tuberculosis in Childhood:** Macroscopic and Microscopic. (D) 1976
- Wfe **Weaning foods and energy:** Increased energy concentration of food. Why and how? (NAO) 1985
- XpC **Chest Radiology in Children:** Interpretation of selected abnormal appearances in chest X-rays. (D) 1985
- XpU **Radiology of Urinary Tract and Intestine in Children:** An investigation of the urinary tract, and selected abnormal abdominal X-rays. (D) 1985
- XrC **X-rays in Childhood:** Some diagnostic X-rays for students to study. (DN) 1971

Ways of having slide sets prepared

SELF MOUNTING SETS:

To keep the cost low, we send the slides as a film strip for you to mount yourself. Self-sealing mounts and instructions are included. These sets are very popular, and most people have no difficulty mounting the slides.



MOUNTED SETS:

Exactly the same items - but they cost more because the slides are ready-mounted.

SETS MOUNTED IN PLASTIC FILE/FOLDER OF FILE/BAR:

Each set of slides comes in a special plastic sheet with 24 pockets. Several sheets are put into a card folder with their scripts. Or, you can hang the plastic sheet on a bar to store in a filing cabinet. You can also use the plastic sheets to prepare slides for a lecture by holding the whole sheet in front of an X-ray viewing box or window.

SLIDE/TAPE SET:

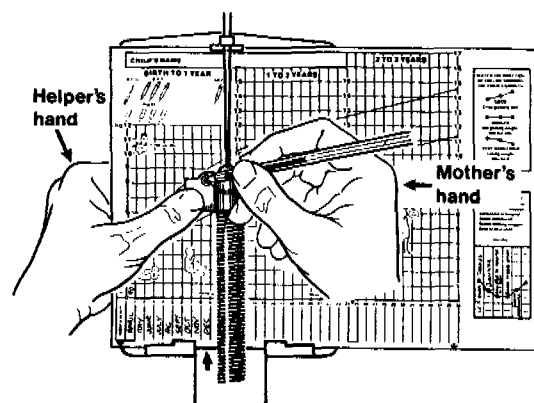
This consists of a mounted set of slides in a plastic file, a cassette with the script recorded on it and the written script. Students can listen to a recorded tape and see the slides that go with it! This may also assist the understanding of spoken "medical" English. Any cassette tape player and projector can be used.

Accessories

TALC DIRECT RECORDING SCALE

A simplified low cost way to monitor child growth.

Plastic Scale Kit comprising: plastic scale with the special TALC spring (weighing to 17kg), W shaped hook, suspension cord (3m of nylon with 200kg breaking strain), instruction leaflet and a wall chart in English on the use of the scale, with health tips. 30 Child Health Charts which are available in six languages (See below) are also included.



CHILD HEALTH CHARTS

Growth charts of this type are now widely used. The TALC chart has undergone extensive testing and development over 20 years. We strongly advise gaining experience with these before developing your own. Now printed on Syntcape - a plasticised paper which is practically untearable. English, Arabic, French, Portuguese, Spanish or Zulu.

CHILD HEALTH CHART FLANNELGRAPH

The introduction of child health charts is not easy. Many health workers are unused to the concept involved in completing a growth curve. Even more have problems in understanding and interpreting a growth curve. Exercises in which they are involved using a flannelgraph can be an important step in the successful use of growth charts. The Flannelgraph consists of a growth chart printed on cloth 91cm x 62cm, a sheet of symbols to cut out and detailed instructions.

FAMILY PLANNING, STDs & AIDS FLANNELGRAPH

There are 5 sheets of flannel printed in colour and a 55 page text. The pictures may be adapted to meet the level of understanding and the sensitivities of each group.

NUTRITION AND CHILD HEALTH FLANNELGRAPH

This flannelgraph is appropriate for village teaching in large areas of Africa. There are seven sheets of cutouts and detailed illustrated instructions. The subjects covered are: Feed Your Children Often, Give your child plenty of soup, Learning to eat, Diarrhoea prevention and home management, Measles, Come to the Child Welfare Clinic. A very useful aid for those involved in teaching nutrition, health and development at village level.

WORM FLANNELGRAPH

An important set designed in Africa, dealing with hookworms, roundworms and tapeworms. The script introduces ways of using flannelgraphs to communicate ideas about health, details the life cycle of the worms, their harmful effects, treatments for infected people, the prevention of the spread in a community and includes improved hygiene and sanitation.

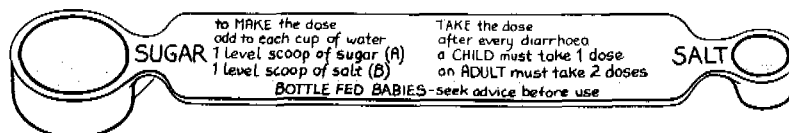
WEIGHT FOR HEIGHT CHART

The weight for height chart is a new technique to simplify the measurement of children's nutrition. It may be used in conjunction with a **Child Health Chart** or independently, if weighings are infrequent, or if the age of the child is not known. The chart is printed on a large sheet and should be placed in an upright position. A health worker weighs the child and stands him against the column marked with his weight. Shading or colour indicates the child whose weight is less than 80% of the standard weight for his height. **Coloured** - Red/Yellow/Green (140 x 100cms.) available with the instructions in Portuguese, Spanish, French or blank for you to translate the English into the local language. Also **Black and White** (90 x 100cms.).

INSERTION TAPE for measuring upper arm circumference etc. in millimetres.

SUGAR AND SALT MEASURES

Spoons for home use, to prevent dehydration (English, Arabic, Chinese, French, Portuguese, Spanish)



1-4-1 AIDS GAME

1-4-1 is a A2 (poster) sized board game with colourful cartoon figures engaged in socially helpful and socially harmful behaviour. Factual and discussion questions relating to HIV/AIDS are included together with a dice.

TALC BABY

An A3 sheet of paper, which you may photocopy. Stick it on to cardboard and cut it out to give a two dimensional model with which to illustrate the importance of the position of the baby's head during birth.

Resource Centre Network

The Centre provides technical support to PHC resource centres in Kenya, India, Tanzania and the West Bank. These centres respond to specific local needs by disseminating information and resources on health through training courses and workshops, demonstrations of appropriate technologies, production of health education materials and translating materials into local languages.

AHRTAG has worked with the resource centres to assist in identifying their roles and functions, assessing target group needs, setting objectives, using computers, developing documentation skills and outreach strategies.

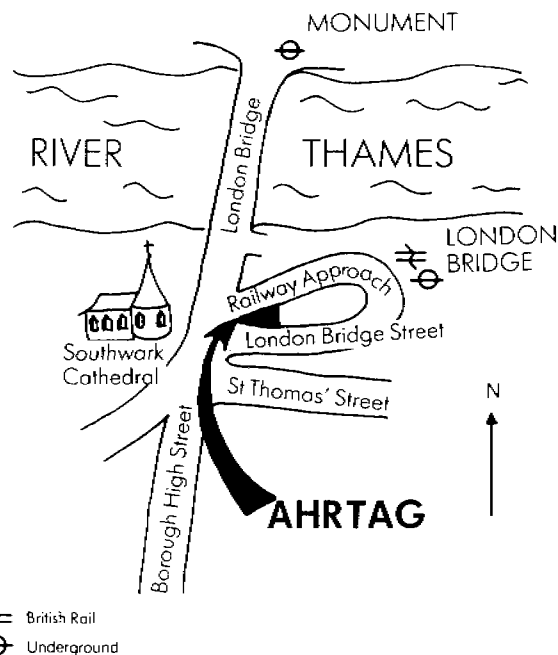
Publications

AHRTAG produces a series of resource lists and directories at low cost (see publications list for prices and order form):

- Directory of Primary Health Care courses in Britain: six months — two years.
- Directory of Primary Health Care courses in Britain: under six months.
- Primary Health Care in developing countries — a guide to resources and information in the UK.
- Health education on diarrhoeal diseases
- Community assessment and evaluation
- Sources of Spanish language teaching materials and information
- Sources of French language teaching materials and information
- Free international newsletters

AHRTAG — an international health information charity

- Provides an information and enquiry service to health workers in developing countries
- Publishes practical manuals and newsletters about a variety of health topics including AIDS, acute respiratory infections, diarrhoeal diseases, disability and dental health
- Has a resource and information centre, containing a comprehensive collection of primary health care materials, which is open to visitors by appointment
- Organises courses and workshops for health workers.



For more information please contact AHRTAG, 1 London Bridge Street, London SE1 9SG, UK. Telephone: 01-378 1403 Fax: 01-403 6003.

Resource Centre



Information for health worldwide

HRTAG — the Appropriate Health Resources and Technologies Action Group supports the Primary Health Care (PHC) approach adopted by many countries worldwide where health workers and communities work together to improve local health care provision.



A non-government organisation, established in 1977, AHRTAG facilitates the exchange of information and experience by networking with international, government and voluntary agencies working in health and development.

PHC relies on information exchange, particularly information which enables people to share experiences in responding to health needs around the world. Information helps to demystify health knowledge and bridge the gap between medical professionals and other health workers.

Resource centres can take an active role in promoting PHC within communities and among health workers. They can respond more effectively to local needs and act as a focal point through which workers have access to information, as well as developing links with people in other sectors and regions. Information once gathered can be disseminated in a variety of ways — through workshops, demonstrations of appropriate technologies, production of newsletters and health education materials, translations of useful materials and training courses.

■ The AHRTAG Resource Centre

AHRTAG's Resource Centre has a comprehensive collection of materials on PHC in developing countries with over 10,000 documents including books, manuals, articles and training materials. Subject areas include: mother and child health, diarrhoeal disease treatment and prevention, immunisation, water and sanitation, respiratory infections, AIDS, community health education, urban health, planning and management, and community based rehabilitation.

The Centre also maintains:

- information on organisations working in PHC at international, national and regional level
- over 350 periodicals and medical journals as well as national, regional and local newsletters

- a collection of videos and health education materials, including slide sets and materials from TALC (Teaching Aids at Low Cost)

- a computerised bibliographic database which can be accessed on request

Visitors are welcome to come and use the reference materials. The Centre is open between 10.00am and 5.00pm from Monday to Friday, by appointment only for first time visitors. Photocopying facilities are available.

■ Briefing service

■ Training

A briefing service is used by volunteer and other agencies sending health workers to developing countries. The health workers are introduced to the work of AHRTAG and materials in the centre.

A number of university based PHC courses send student groups to visit the Centre on an annual basis.

AHRTAG and the Bureau for Overseas Medical Services (BOMS) run a short course twice a year called Introducing Health Care in Developing Countries. This orientation course is suitable for health workers from the UK and Europe going to work overseas for the first time, and takes a PHC approach.



ICH (International Child Health Unit) belongs to the University of Uppsala, Sweden. It is committed to the promotion of health in developing countries by:

- training doctors, nurses and rehabilitation personnel for work in developing countries
- carrying out research on child health and development and on nutrition deficiencies that may lead to various dysfunctions and disabilities
- advising national and international organisations in development co-operation on projects for and with disabled people
- providing library and information services, among these the one on disability and rehabilitation in collaboration with AHRTAG

SIDA, the Swedish International Development Authority, which supports health and rehabilitation projects in African and Asian countries, is the main funding agency of ICH.

For more information please contact ICH, University Hospital, S-751 85 Uppsala, Sweden.

Tel: 46 18 66 59 96 Fax: 46 18 50 80 13

AHRTAG and ICH are grateful to SIDA for funding the Disability Information Service.

- *The Disability Information Service uses the computer software CDS/ISIS which was developed by UNESCO specifically for use in developing countries. The software is available free of charge from UNESCO to organisations in developing countries.*

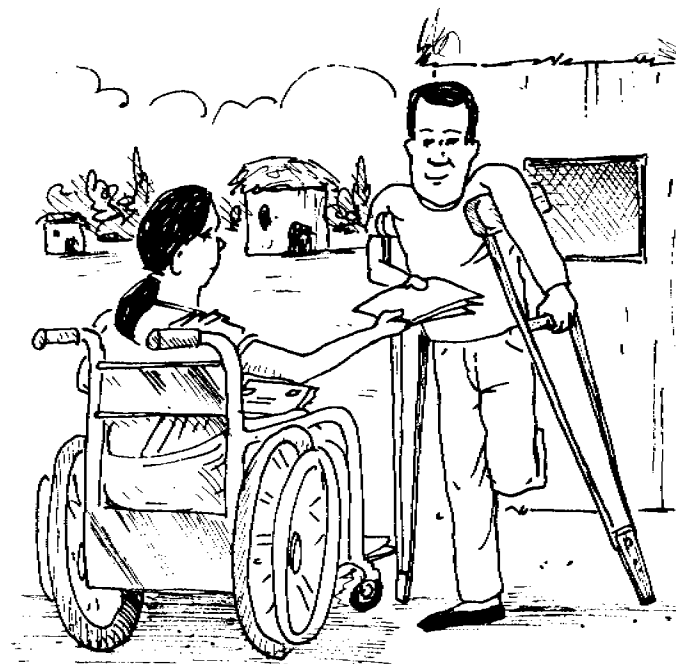
AHRTAG (Appropriate Health Resources and Technologies Action Group) has been working since 1977 to support staff working in primary health care programmes in developing countries. AHRTAG:

- has a primary health care resources and information centre open to visitors by appointment
- provides an international enquiry service for health and rehabilitation workers
- provides an audiovisual service consisting of a photographic, video and slide library
- publishes a wide range of practical newsletters, manuals, resource lists and training directories on health issues
- collaborates with primary health care organisations on developing resource centre and publications activities
- supports the development of international health information networks
- organises courses and workshops for health workers

For more information please contact AHRTAG, 1 London Bridge Street, London SE1 9SG, UK. Tel: 44 71 378 1403 Fax: 44 71 403 6003 E-mail: GEO2:AHRTAG

- *AHRTAG and ICH are interested in developing closer links with resource centres and libraries that are planning to computerise their collections of materials on disability. Please let us know of your disability information needs and what your organisation is doing in this area.*

Disability Information Service

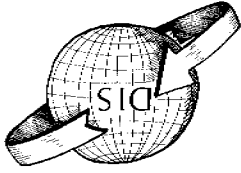


AHRTAG 

The Disability Information Service is specifically for disabled people in developing countries and those working with them.

It provides ready access to an extensive range of written materials on disability and rehabilitation, including books, manuals, conference proceedings, journal articles and unpublished reports.

The emphasis is on materials that cover the community based approach to rehabilitation, particularly those produced in developing countries.



How do I use the service?

Just write in with details of what specific area you are interested in receiving information. Please be as precise as possible, so that we can ensure that any information sent to you is relevant to your particular needs.

Universities, libraries and all enquirers from the Nordic countries and all enquirers should write to:

Disability Information Service
ICH

University Hospital
S-751 85 Uppsala

Sweden

Development projects, other organisations and individuals should write to:

Disability Information Service
AHRTAG

1 London Bridge Street
London SE1 9SG

UK

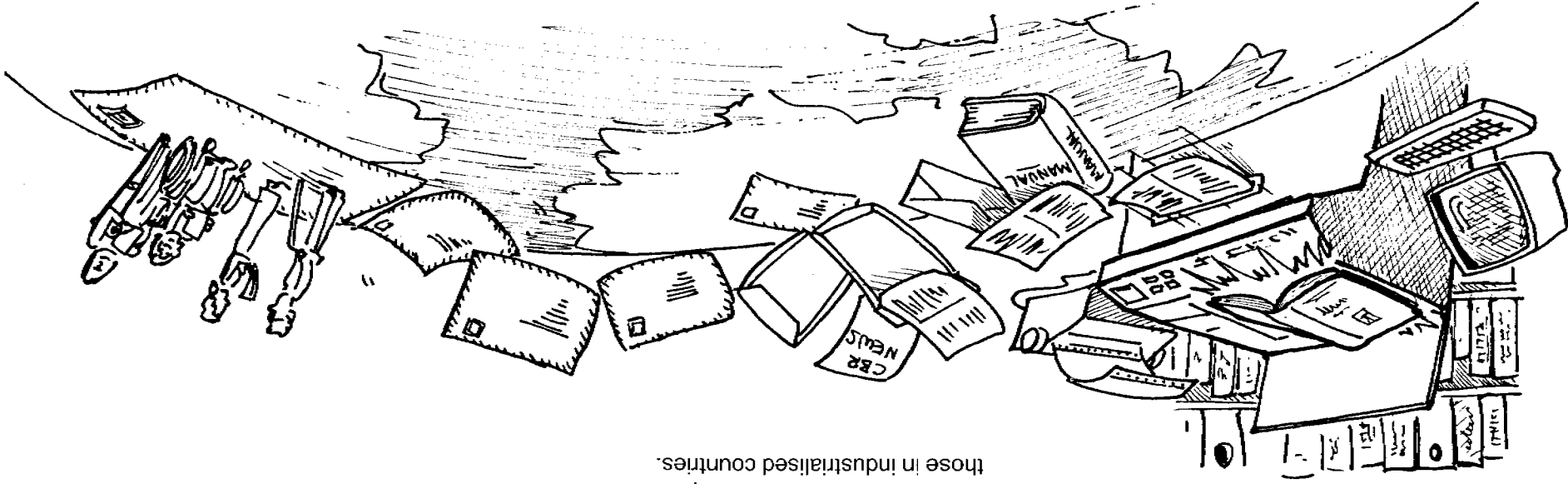
What is included?

Initially users are sent photocopies of selected journal articles or unpublished reports held at AHRTAG or ICH. If further information is needed, you will be sent a computer print-out listing bibliographic details, source and cost of materials in your particular area of interest.

What does it cost?

There is no charge to individuals and organisations in developing countries. A small fee to cover costs will be requested from those in industrialised countries.

The service has been set up jointly by AHRTAG (Appropriate Health Resources and Technologies Action Group Ltd) in the UK, and the International Child Health Unit (ICH) at Uppsala University, Sweden. These organisations liaise closely with the United Nations Disabled Persons Unit in Austria. The Unit is setting up a clearing-house on disability and rehabilitation worldwide which will co-ordinate a worldwide network of resource centres and databases.



Life-saver or blood sucker?

AIDS is most commonly transmitted through sexual contact. But the risk of being infected with HIV through a single, HIV-infected blood transfusion is over 90 per cent — far higher than the risk of infection through a single act of sexual intercourse with an HIV-infected partner.

Medical and social scientists alike agree that AIDS often makes a bad situation a whole lot worse. The question of blood safety is no exception. If blood was always donated for purely humanitarian reasons, and in adequate amounts, maintaining safety and quality control would be far simpler. But unfortunately, much of the world's blood is bought and sold like any other commodity.

The examples of blood trading described on pages 4-5 illustrate the danger of relying on commercial donors to meet the demand for blood. Often the people who have to sell their blood to survive are those most at risk from serious communicable disease.

The need for all countries to establish a reliable pool of regular, voluntary and safe blood donors has never been more urgent.

Searching for safer donors

Since the start of the AIDS pandemic, voluntary blood donations have actually dropped in many countries. Health education campaigns and media stories linking AIDS to blood transfusions have frightened many donors, who mistakenly believe that it is possible to get HIV from *giving* blood. (This is impossible where equipment used to collect blood is properly sterilised.) Others have stopped giving because they

know that their blood will be tested for HIV, and fear the result.

Discussions with potential donors in anglophone Africa have shown that many are worried about the blood donation process itself; AIDS only adds to their fear and confusion.

However, a well planned donor education campaign *can* substantially increase the number of voluntary donors.



A successful donor recruitment campaign should:

- identify a target group with low HIV seroprevalence (for example young people in school);
- find out about relevant attitudes, traditions and beliefs (e.g. through small discussion groups);
- develop educational programmes demonstrating what the gift of blood can offer and reassuring people about their concerns;
- treat all donors courteously.

Donor recruiters have found that strategies that work for other types of community education — involvement of community leaders, peer support and encouragement, appreciation and public recognition — are equally helpful in attracting blood donors.

Recruiters nevertheless face difficult questions when they ask people to give blood. Perhaps the most difficult issue to emerge since the start of the AIDS pandemic has been whether or not to tell a donor that his or her blood has tested positive for HIV. The arguments are ethical as well as practical, as explained on pages 6-7.

Use and abuse

Just as important as the collection of blood is its rational use. Blood transfusions are often given unnecessarily — particularly for anaemia. Training of doctors and health workers on the rational use of blood is an essential part of any blood safety programme.

Good primary health care can reduce the need for transfusions: health workers should routinely check for anaemia, and treat early. Nutritional advice should also be given. At the national and international level, health and development programmes that tackle some of the *causes* of severe anaemia (such as malaria, bilharzia and hookworm) should be strengthened.

Clearly, global blood safety in the era of AIDS has moved beyond the limited technical solution of screening, although this is obviously important. The humanitarian motives of voluntary unpaid donors are in sharp contrast to the continued buying and selling of blood, and the reluctance of some governments to challenge the economic interests of the blood trade.

Brave lobbying and co-operative efforts in every country are needed to take blood out of the market place. Otherwise, we are merely sucking the blood of the poor to develop unsafe products for all.

Barbara Wallace, formerly AIDS Co-ordinator, League of Red Cross and Red Crescent Societies.

Special issue on blood safety:

- The blood trade
- National and international programmes
- HIV testing — ethics and practicalities

AHRTAG

Appropriate Health Resources & Technologies Action Group Ltd

1 London Bridge Street,
London SE1 9SG, UK.

The Zimbabwe experience

Despite increasingly high levels of sexually acquired HIV infection in the adult population, Zimbabwe's experience in developing a national safe blood supply is an extraordinary success story; one which illustrates not only the need for effective management at national level, but also for government support and political commitment.

Zimbabwe was the third country in the world to begin routine HIV antibody testing of blood. The National Blood Transfusion Service (NBTS) began screening in July/August 1985, and was the only centre testing clinical AIDS cases until 1989.

The following summarises key observations made:

- When donors were automatically informed of their HIV status, there was a general increase in the number of new first time donors, suggesting some people used the Service as a testing centre. However, the number of general donations decreased due to the fact that regular or potential donors were afraid of finding out if they were HIV positive.
- First time donors generally have a higher rate of HIV seropositivity compared to regular blood donors (a

common finding in nearly all BTSs).

- New donors, in particular, who have clinical symptoms indicative of AIDS, believe the only way of confirming their suspicions of AIDS is to have an HIV blood test. In the absence of alternative, free HIV testing sites, they use the BTS to discover their HIV status.
- Regular donors who have lapsed for more than one year also tend to be less safe and reliable and may be using the BTS as an HIV screening service. New and lapsed donors telephone the BTS to enquire about their results.
- Regular donors are exposed to pre-donation education each time they attend and are more likely to exclude themselves from donating if they feel their sexual behaviour and/or health

The National Blood Transfusion Service of Zimbabwe (NBTS) is a non-profit organisation, with a National Committee consisting of senior members of the Ministry of Health, Zimbabwe Red Cross Society and representatives of blood donors. The committee, with the government, is responsible for formulating and implementing policy. All blood donations are voluntary and non-remunerated. The Red Cross Society assists in blood donor recruitment and collection, since this is part of the Service's overall activity, standards of operation apply equally.

status indicates their blood may not be suitable.

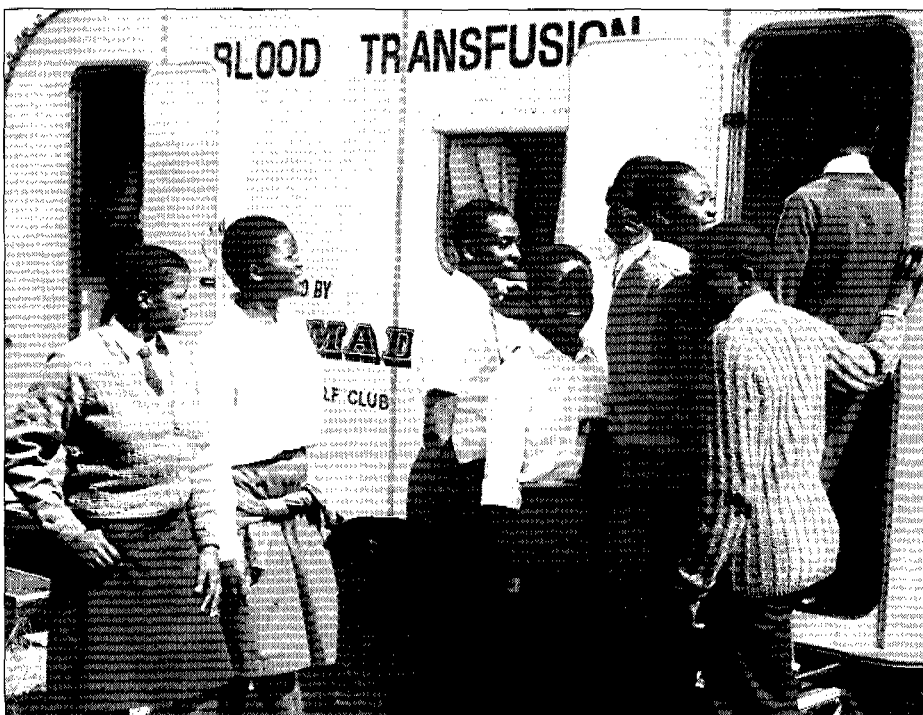
- Confidential, pre-donation counselling encourages the donor to self exclude and be more willing to do so. However, crowded rooms with lack of confidentiality mean that self exclusion is almost impossible; any reluctance to give blood would single out the person not willing to donate.
- A low rate of seropositivity is associated with students and school children (17-19 years of age).

Based on the above, the Service has adapted its programme in two main areas:

Blood collection Since school donations show a low HIV seropositivity rate, resources have been diverted into collecting blood during term-time from students in the 17-19 age group. This has resulted in an increased proportion of safe blood, and because each year sees new students eligible for donation, ensures a continuous source. The younger the blood donor, the safer the donation. During school holidays, however, there is a general shortage of blood; efforts to collect blood in workplaces among regular adult donors are stepped up.

The Service has developed health awareness materials and a routine health questionnaire which help the donor to decide if their blood is free from blood-borne diseases, including HIV. It was found that the material was not sufficient by itself and it is now reinforced by the following:

- pre-donation talks given during mobile collection sessions by experts



Blood collection in schools (17-19 age group) has resulted in an increased supply of safe blood. The younger the donor, the safer the donation.

explaining who should give blood and why. Talks focus on the tests done and why these are necessary. Post-test HIV counselling procedures are discussed.

- a comprehensive medical history is taken of each donor. A nurse discusses the routine health questionnaire with the donor, and completes it on the donor's behalf, ensuring a more accurate risk assessment.

To increase blood donation country-wide, five new collection branches have now been opened (one in each province). Samples from all blood collected are tested in one of two main centres (Harare and Bulawayo).

Informing seropositive donors Initially, when donors were automatically informed of their HIV status, they were told by their respective doctors. This policy was in operation for two years when the prevalence of HIV in blood donors was low. As the prevalence of HIV rose, doctors as well as primary health care staff could not deal with the large numbers of people seeking counselling. It also became evident that not all blood donors wished to know their results and that the donor should have the right to choose. Accordingly, the Service developed a system where, if the donor wishes to know, s/he is informed through a chosen doctor (consented donor).

If they do not wish to know, it is explained that BTS will not bleed them again if *any* of the serology tests that are carried out by the BTS are positive — but it is not specified which result is positive (non-consented donor). Tests carried out include syphilis, hepatitis B and C, and HIV. One major disadvantage is that non-consented donors, when subsequently rejected by the BTS, tend to assume that they are HIV positive. To counter this, pre-donation talks emphasise the fact that HIV is not the *only* test done. Donors are given the opportunity to change their decision.

This practice has been in operation for one year and, to date, the only serious problem is the national shortage of doctors and trained counsellors to provide support for the blood donors who test positive for any of the tests done.

D A Mvere and S E Lloyd, National Blood Transfusion Service, Zimbabwe.

Blood Programme of the League of Red Cross and Red Crescent Societies

Of the total amount of whole blood collected worldwide every year, over one third is collected by National Red Cross and Red Crescent Societies. Professor Robert Beal, Head of the League's Blood Programme (LBP) in Geneva, describes current international action on blood safety.

Blood is a priceless gift — or should be. Without a doubt, the quality of blood in voluntary non-profit blood banks is higher than in any commercial operation. The League's Programme is based on one fundamental principle: the recruitment of volunteer blood donors who receive no financial or material incentive whatsoever for their gift, i.e. non-remunerated donation. This principle is promoted in the following ways:

■ **Support to National Society blood programmes (e.g. through technical advice).** Red Cross/Red Crescent Societies accept total responsibility for the national blood programmes in 22 countries; in a further 37 countries, they run collection programmes which contribute to the national resources and, in most of the remaining 88 countries, are involved in donor recruitment and retention.

Assistance is provided at the request of the National Society and may involve in-country visits by a member of the League's technical staff or workshops at which representatives of National Societies and governmental transfusion services are present. A regional workshop held in Harare in 1990, for example, focused on management and leadership, and recommended (in particular) the need for professional skills development and career plans for those involved in the recruitment of regular, low-risk blood donors.

■ **Collaboration with relevant international bodies.** A particularly important collaboration exists with the World Health Organization. In 1988, the Global Blood Safety Initiative (GBSI) was formed, in which the LBP works closely with staff within the WHO Global Programme on AIDS and the Unit of Laboratory and Blood Safety. This initiative also involves the International Society of Blood Transfusion,



Donating blood at the Ethiopian Red Cross.

the United Nations Development Programme (UNDP) and some governments. Its primary objective is to support the development of integrated blood transfusion services in all countries. Collaborating partners employ consultants who, through site visits and regional consultations, develop guidelines, manuals, and other publications. Recent informal consultations have dealt with autologous donation (where an individual 'donates' blood for his/her own future use), recruitment and retention of voluntary non-remunerated donors and training needs — all with a third world emphasis.

■ **Publication of relevant information.** GBSI consultations result in documents published under the joint logos of LRCRCS and WHO, which can be accepted as the best current expertise/advice on the topic concerned. A range of guidelines includes counselling of HIV positive donors (back page). Publications available from: **The Blood Programme, LRCRCS, P O Box 372, CH-1211 Geneva 19, Switzerland.**

At life's expense

The blood trade is a shocking example of how profit rarely benefits those who work to produce the original product. People who *sell* their blood are precisely those who are unable to *buy* it. Most commercial donors live in poor conditions, and in poor health. They are a sector of the population whose health can least afford regular blood loss, and who are most at risk from communicable disease. This is not just a third world problem. This is a global, multi-million dollar industry. The following reports reveal how the blood trade, while attracting higher risk donors, does little to invest in quality control or essential research into the extent of blood-borne diseases.

USA

Risk attraction



Mark Edwards/Still Pictures

Out of 2,921 intravenous (IV) drug users in Baltimore, USA, 793 had donated blood at some time in their lives. 652 continued to donate after they had started to use IV drugs. Of these, 88.1 per cent gave through the commercial sector, and only 11.9 per cent to voluntary blood banks. Of the total 2,921 addicts in the study, 24.1 per cent were found to be HIV positive. [JAMA, vol. 263, 1990, pp. 2194-7].

BRAZIL

Breaking the blood mafia

Blood supply management in Brazil has always been appalling, but when the first AIDS statistics were published the situation caused a public outcry. One fifth of the registered cases of AIDS in Rio de Janeiro were the result of blood transfusions or blood products contaminated with HIV. It was immediately clear that infected blood was responsible for a range of other communicable diseases. A study carried out in 1987 revealed that 70 per cent of beggars in Rio de Janeiro were regular commercial blood donors. Of this 70 per cent, seven per cent showed positive when tested for Chagas' disease, 22.8 per cent for hepatitis, 12.9 per cent for syphilis and seven per cent for HIV. Around 85 per cent of haemophiliacs in the country have been infected by contaminated blood and/or blood products.

Brazil's blood trade relies on a complex and secret network of blood product suppliers, blood donors and users. In 1988, the new Constitution prohibited the sale of blood in Brazil, but this law only exists on paper. At the end of 1990, the Director of the Blood Transfusion Service/AIDS division announced that blood supply management in Brazil was still not under control. Although the Brazilian authorities recognise the seriousness of the problem, they still have done nothing to deal with it. Six months on, the situation remains unchanged.

The truth is that nobody in the

country has an accurate picture of who donates blood or how many blood donors there are. Nobody knows how many are voluntary and how many are professional. This ignorance is beneficial as far as the blood trade is concerned. Such a profitable industry has no interest in centralising data or supporting research into the spread of disease. Unless Brazil's 'blood mafia' is controlled, today's quick profit will always be more important than tomorrow's painful death.

Herbert Daniel, Brazilian Interdisciplinary AIDS Association (ABIA), Rio de Janeiro, Brazil.



Zafar/WHO

Beggars in Rio de Janeiro sell their blood in order to survive.

INDIA

The art of buying blood in Ahmedabad

Dr Radium Bhattacharya, co-ordinator of an AIDS training and awareness programme in the commercial blood sector, explains the background to the buying and selling of blood.

Commercial blood donors (CBDs) are mainly young males who are pavement dwellers (some migratory) with no fixed address. Most are illiterate and have no other skill to earn a livelihood, having been in the blood trade for ten or more years. Separated from their families, they are likely to have more than one sexual partner. Many of them are addicted to tobacco and alcohol, although in Ahmedabad none are IV drug users, as far as we know. Our project involves around 100 CBDs in Ahmedabad city. These donors operate through middlemen or agents in contact with the hospital, clinic or pathology laboratory.

There are two types of agents: institutional agents, who act for the hospitals attached to medical colleges, and agents who operate for private clinics, pathology laboratories or blood collecting centres. Each agent has his own group of CBDs. The agents do not own any offices but they do have contact telephone numbers in shops where

Ashok's story

The lives of a great majority of India's 830 million inhabitants are dominated by poverty, unemployment and disease. Many are forced to sell their blood, or even a kidney, just to survive. Journalist and AIDS control activist Shyamala Nataraj talked to Ashok, a professional blood donor from Madras.

Ashok was a regular paid donor at a Bombay blood bank. Two years ago, he was told he was HIV positive. 'I started giving at other blood banks. If they made a fuss, there was always some pathology laboratory willing to buy, no questions asked. Why should I go out of my way to tell them? It's



they pay a monthly service charge. After receiving a call from the hospital or private clinic, the agent will contact a blood donor in the blood group required.

Each CBD is bled more than five times in a month, and some are donating a number of times a week. The donors are aware that their blood should meet certain specifications like haemoglobin content, failing which they may not be able to give blood or they will be paid less. 'We take iron tablets to keep the colour,' one donor told us.

Dr Radium Bhattacharya, SIRMCE, B/02 Siddha Chakra Apartments, Ellisbridge, Ahmedabad-380 006, India

their job to test the blood.'

When Ashok heard of the trade in organs, he decided to sell one of his kidneys. This would fetch him Rs25,000 (750 pounds sterling). A friend took him to an agent and the deal was fixed. 'They did many tests on me to see if my kidney matched but obviously didn't do the HIV one. I got caught only because another donor told the doctor.'

Ashok's story clearly illustrates the need not only for adequate HIV counselling, but also for alternative income-generating opportunities for commercial donors found to be carrying any dangerous blood-borne disease.

Money earned by a commercial donor is distributed among agent, hospital wardboys and personnel at the blood collecting centres.

'AIDS has reached India'

In January 1989, daily newspapers carried headlines announcing that HIV antibodies had been discovered in blood products manufactured in India. The truth had finally hit home: 'AIDS has reached India, and no-one is safe from it' [*Indian Express*].

By the end of February 1991, 820,400 people had been screened throughout the country for the presence of HIV antibodies. Of these, 4,778 were found to be positive (confirmed by Western Blot) giving a rate of 5.82 per thousand.

Heterosexual transmission accounted for just over half of these. Blood donors accounted for 17 per cent of the total number, only slightly lower than intravenous drug users at 23.2 per cent. In Maharashtra alone the percentage of infected blood donors (27.3 per cent) was higher than that of infected sex workers (27.1 per cent).

India's most immediate problem is that it cannot afford to eliminate commercial blood donation overnight, since this provides up to 50 per cent of all transfused blood in the large cities.

Commonsense and sensitivity

The Medical Mission Institute based in Germany has considerable experience in providing assistance to developing countries in AIDS prevention and control. This includes the introduction of HIV testing kits to rural hospitals in eleven African countries, India and Papua New Guinea. Staff at the Institute provide an overview of the key ethical and practical issues involved.

AIDS is the final stage of infection with HIV. But this infection is difficult to recognise; it can take many years before an infected individual develops any signs or symptoms of HIV disease/AIDS. In the meantime the virus may be passed on to others unknowingly — through donating infected blood, or (more commonly) through sexual transmission and from a mother to her unborn child. It is therefore understandable that so much importance is attached to the test for HIV.

But what do HIV tests tell us? Most tests do not detect the virus itself, since this is a very complicated, expensive procedure. Tests commonly used detect the virus only indirectly, by demonstrating the presence of antibodies to the virus produced by the immune system¹. However, after initial infection with HIV, it takes some time for antibodies to be produced and to be detectable — usually a few weeks, but sometimes a few months or even years. During this period (known as the 'window period') the HIV antibody test will be negative, even though an infected person's blood, sperm or vaginal fluid are infectious to others.

This means that a single test cannot indicate for sure whether an individual, or a unit of donated blood, is free of the virus or not. This causes problems, not only in the misleading use of tests used by individuals to declare they are 'AIDS free', but also for ensuring a totally safe blood supply. The window period means that blood must be donated from sectors of the adult population who are considered a lower risk from HIV.

A question of accuracy

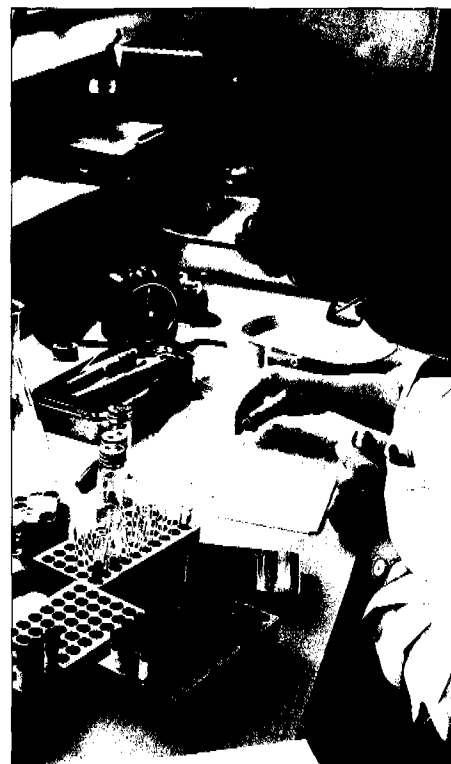
The quality of a test is determined by its *sensitivity* and *specificity*. Sensitivity describes the probability (expressed as a percentage) that the test result will

be positive when antibodies to HIV are present. Specificity describes the probability (as a percentage) that the test result will be negative if antibodies to HIV are not present. An ideal test would be 100 per cent sensitive (always positive if HIV antibodies are present) and 100 per cent specific (never positive if they are not present). But no test is ideal.

HIV antibody tests are divided into two groups:

- **screening** (ELISA, membrane capture assays, agglutination tests).

'Testing for HIV does have a role to play in AIDS control programmes, but it can cause more harm than good if the implications are not fully understood.'



These are used for blood transfusion purposes and should have a high sensitivity to 'net' all possibly infected samples, which usually means that some uninfected samples are also 'caught'. A single positive test result does not necessarily mean that the tested person is infected.

- **confirmatory** (Western Blot, Immunofluorescence, Radioimmuno-precipitation assay). These should have an especially high specificity. They are used to find out which of the samples 'caught' by the screening test should really be considered as infected. Even these tests do not give 100 per cent assurance of a person's sero-status (whether they are HIV positive or negative).

Prevention or persecution?

Depending on the reason for carrying out the test in the first place, a tested individual may or may not be told if their HIV antibody test is positive (see next page). However, the following principle should ideally apply: at least one positive screening and one positive confirmatory test are needed before a result is made known to the individual concerned.

It is a commonly held view that if a person is told their HIV antibody positive result, s/he will ensure that the spread of the virus to others is prevented. This principally means changing their sexual behaviour. However, little is known about how and why people are motivated to change their most intimate behaviour, but knowledge, emotional well-being and respect for others are surely fundamental. All too often, however, infected individuals must endure all the negative consequences of knowing their positive result, and none of the benefits, such as psychosocial assistance, early diagnosis, prevention and treatment of opportunistic infections, and (although experimental) anti-viral regimes. First they may be told this devastating news in a seemingly insensitive way by an overworked health professional. Once labelled 'HIV positive', these people then face social isolation and discrimination.

Even where the test is negative, testing for HIV without proper counselling can actually promote the spread of the virus. People with a negative test result may well develop a false sense of

security which can tempt them into continuing with risk behaviour ... until the test turns out positive.

When, why and whom to test

In all test situations confidentiality is of the highest priority.

■ **Testing of individuals** This should only be done with proper informed consent, where the individual has fully considered the implications of receiving both a negative and a positive result (voluntary testing).

The reason for testing, and being told the result, should be carefully considered. Many people may be in personal and/or economic situations in which they cannot change their risky behaviour, regardless of the result.

Testing on the request of a third party (governments, religious institutions, schools, employers) is both ethically and practically very questionable. Stated reasons such as 'We don't want to invest in a scholarship for someone who is going to die' reflect a prejudice and lack of understanding about the test and the nature of the infection. A negative test does not necessarily mean that the individual won't become infected some time in the future. Even if the individual is infected, they may remain healthy for many years — plenty of time to have a productive input into a company! If the individual, after pre-test counselling, still wants to be tested, the result should *never* be given to the third party without written consent (given *after* the results) of the tested individual.

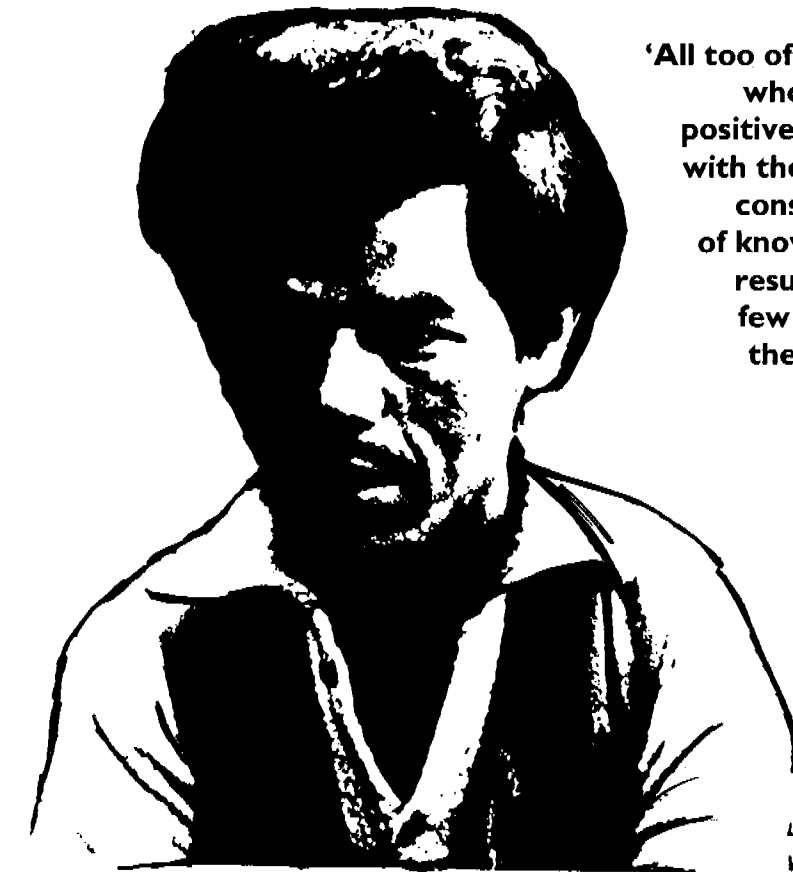
Where HIV testing is carried out to support a clinical diagnosis of HIV disease/AIDS, individuals should only be asked to undergo a test if the result will help in deciding on the best course of medical care.

■ **Testing population sectors for epidemiological surveys**

This can only be done with the approval of qualified authorities. Surveys conducted without the informed consent of the individuals tested must ensure that the results are not given to the person whose blood was screened and that their name is not linked to the results (known as anonymous testing).

■ **Screening of donated blood**

Donors should ideally be screened before actually testing for HIV antibody



'All too often, those who test HIV positive are faced with the negative consequences of knowing their result and see few (if any) of the potential benefits.'

dies by identifying any past high-risk behaviour, taking a medical history and conducting a medical examination (i.e. blood from donors with a history or signs of a sexually transmitted disease should be excluded).

All units of blood which test HIV antibody positive must be destroyed. Where informed consent has not been given, and/or proper counselling cannot be provided, and/or confirmatory testing cannot be done (since this is expensive) the screening results should not be disclosed to the donor concerned (see Zimbabwe experience, pages 2-3).

The principal aim of testing blood samples is to render blood transfusions safer, not to find seropositive individuals.

Which screening test to use?

For rural hospitals in poor countries, where blood cannot be stored but is often needed in emergency situations, a test is needed which does not require additional equipment, is highly sensitive and specific, easy to perform in a short time and can be used economically on small numbers of blood samples. Under these conditions we recommend HIV Chek (see AIDS action issue 5), which is now distributed

by Ortho Diagnostics.²

However, the price of HIV Chek is still far too high for most developing countries and serious delays have been experienced in supply and delivery.

In summary, testing kits should not be supplied to *anyone* without sufficient written guidelines on ethical as well as practical indications for their use. A personal introduction to the benefits and limits of testing by a trained professional is crucial.

Dr Nikola von Hassell, Dr Barbara Krumme, Dr Klaus Fleischer, AIDS and International Health Working Group, Medical Mission Institute, Salvatorstrasse 7, Postfach, D-8700 Würzburg, Germany.

1. For further information on HIV testing and tests see AIDS action issue 3.

2. Another low-cost screening test, PATH HIV Dipstick, has been developed for manufacture and use in developing countries, by the Program for Appropriate Technology in Health (PATH), with support from the International Development Research Centre of Canada, and the Rockefeller Foundation. Contact: PATH, 4 Nicker-son St., Seattle, Washington State 98109-1699, USA. — Ed.

No support in Tanzania?

In Tanzania people with AIDS (PWAs) have no support. They are cared for by parents and relatives who are often very poor and live in rural areas. Why has Tanzania not formed an AIDS related non-government organisation? Such an organisation could provide support — especially in remote areas or where PWAs have no support.

A Nsyenga, Ileje, Mbeya, Tanzania.

Ed: There are some local projects that could offer support for people with HIV infection and AIDS. Both the Catholic Church (c/o Catholic Secretariat, P O Box 2133, Dar es Salaam) and the Evangelical Lutheran Church (c/o ELCT Medical Board, P O Box 3033, Arusha) have AIDS control programmes with activities at the diocesan level. AMREF (P O Box 2772, Dar es

Salaam) runs an AIDS Health Services Support Project. There is also a regional AIDS information centre based at the Centre for Educational Development in Health (P O Box 1162, Arusha).

Screening blood donors

A reader writes from Africa: screening of donated blood has recently been introduced here in a small town hospital. Technicians from all parts of the country including ours were given a one day training course at the main hospital in the capital city, given supplies of Dupont test kits and have now gone back to their hospitals. I am concerned that the social aspects of testing were not covered in the training. For example, in small towns like ours, those carrying out the tests to screen donated blood or who have access to the results may well know the donors

and there may be a danger that those who are HIV positive will be identified. I would be grateful if *AIDS Action* could give advice about setting up procedures for screening blood, including ensuring confidentiality and how to deal with those who are positive.

Ed: We hope this special issue provides some of the information you need.

Never too young ...

I am a 16 year old who reads the copies of *AIDS Action* which you send to my mother. I was astonished to read in issue 11 about children living on the streets and some starting prostitution as young as eight years old, and particularly about the fifteen year old boy who had been imprisoned four times and hospitalised twice.

Veronica, Bo, Sierra Leone.

Resources

AIDS Orphans in Tanzania; Care and Prevention in Ghana Strategies for Hope

This series of booklets describes pioneering experiences in AIDS care and prevention in several African countries. The latest editions, 4 and 5, look at AIDS care and prevention in Ghana, and AIDS orphans in Tanzania. Each contains practical examples of activities carried out by all sectors of society. Published by ActionAid, AMREF, and World in Need. 300 pages, price £1.50. **Available from: TALC, P O Box 49, St Albans, Herts AL1 4AX, UK.**

Guidelines for the Appropriate Use of Blood

Part of a series of documents produced by the Global Blood Safety Initiative

(see page 3). Aimed at health workers involved in minimising the use of blood transfusions — an essential part of blood safety programmes. Free of charge from: GBSI, WHO, 1211 Geneva 27, Switzerland.

'The life you save'

Sixteen minute video developed for African populations. Designed for use by blood donor programme officers to aid discussion in educational campaigns aimed at encouraging recruitment of regular, committed blood donors who are well informed about HIV and the risks of transmission to patients via infected donations. Developed by the Zimbabwean Red Cross in consultation with the Blood Programme of the League of Red Cross and Red Crescent Societies

(LRCRCS) in Geneva. Funded by WHO. **Available in English from: The Blood Programme, LRCRCS, PO Box 372, CH-1211, Geneva, Switzerland.**

Seropositive donors

Informing a donor who has tested HIV positive requires special skills and must be done in a sensitive way. LRCRCS and the WHO Global Programme on AIDS are examining ways of increasing counselling and support services for HIV positive donors, and the role of blood transfusion services in post-test counselling. Guidelines available by the end of 1991. **Other useful publications, including the regular newsletter *Transfusion International* available from the address above.**

Managing Editor: Kathy Attawell

Executive Editor: Hilary Hughes

Production: Celia Till

Editorial advisory group: Calle Almedal (Norway), Dr W Almeida (Brazil), Professor E M Essien (Nigeria), Professor K Fleischer (Germany), Dr U Küpper (Germany), Professor K McAdam (UK), Dr P Nunn (Kenya), Dr A Pinching (UK), Dr P Poore (UK), Barbara Wallace (UK), Dr M Wolff (Tanzania).

Guest advisor (special issue): Professor R Beal, Head, The Blood Programme, LRCRCS, Geneva.

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Dialogue on Diarrhoea

Issue no. 49
June 1992



The international newsletter on the control of diarrhoeal diseases

The child and its environment

Child health begins at conception. It is influenced by the health of the mother as the foetus grows within the micro-environment of her belly.

After birth, the newborn infant's environment expands to include its immediate family circumstances. Central to these is its mother – breastfeeding by the mother protects and nourishes the newborn with, first, colostrum, and then breastmilk. An infant should consume nothing else during the first four to six months of life. Exclusive breastfeeding (see pages 2-3) plays an important role in providing a safe 'environment' for young babies.

Hygienic disposal of waste

Health risks increase when the child starts to eat other foods, and to move around inside and outside the home. There is a greater chance that the child will consume contaminated food and water. This happens especially where standards of hygiene are low as a result of insufficient resources or education.

Essential to a safe domestic environment is the hygienic disposal of domestic water and human waste. This is considered in the article on page 6, which looks at the construction of local sewerage systems. Other practical aspects of water supply and sanitation in low income areas have been covered in *DD31*.

As this issue of *DD* goes to press, strategies for protecting the global environment have been discussed at the Earth Summit conference in Rio de Janeiro, Brazil. At the other end of the scale, it is important to



Mary-Ann Magtipon/UNICEF-UK

Alastair Matheson/UNICEF-UK

remember that much can be done to protect the immediate local environment of the child – in the womb, at the breast, in the home and in the community – which largely determines its health now and in the future.

As children grow, they move from the safe 'environment' of exclusive breastfeeding, to face health risks posed by the home and community environment – such as potentially contaminated food.

In this issue:

- Exclusive breastfeeding
- Diarrhoea and low birthweight
- Cholera guidelines
- Low cost sewerage

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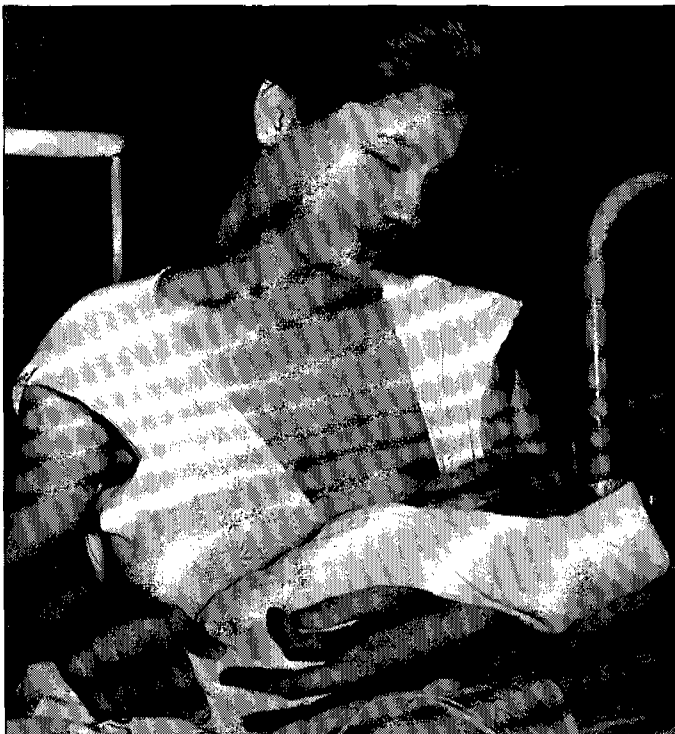
Appropriate Health Resources &
Technologies Action Group Ltd

Exclusive breastfeeding

The value of *exclusive* breastfeeding in the first four to six months of life is being increasingly recognised.

The importance of breastfeeding in helping to prevent diarrhoea in young children is now widely accepted. There is growing evidence that the risk of death and illness from diarrhoeal infections increases sharply when supplements are given in addition to breastmilk.

Most infants in Africa, Asia and Latin America are breastfed in the first few months of life. But many mothers (as well as doctors and other health workers) wrongly believe that infants under four months old need other liquids in addition to breastmilk, especially in hot climates. In Peru and Brazil, for example,



Breast is best – giving extra fluids is unnecessary – a mother in the Philippines breastfeeding her day-old baby.

most infants receive herbal teas or water in their first month of life. In Senegal, West Africa, only 5 per cent of infants under five months old are exclusively breastfed, with over two thirds receiving supplementary water¹.

Dangers of extra drinks

Giving extra liquids is not only unnecessary, but may also be harmful because:

- The baby may spend less time breastfeeding, which means that the mother's breasts are less stimulated to produce breastmilk. A Brazilian study showed that breastfed infants, who received teas or water in the first days of life, did not breastfeed for as long as those who were exclusively breastfed during their first week².
- The extra fluids may be made with unsafe water and given in feeding bottles which are contaminated. In Peru, babies who received water and teas in addition to breastmilk had twice as many days with diarrhoea in any given month as

those receiving only breastmilk³. These findings were confirmed by recent research from the Philippines⁴. Another Brazilian study showed that each additional daily 'feed' with teas or water was associated with a 40 per cent increase in diarrhoea mortality. An infant receiving three feedings of extra fluids a day was almost three times more likely to die than an exclusively breastfed infant⁵.

The message that breast is best, and that giving additional fluids is unnecessary, should be widely promoted among health workers, as well as the wider community.

Professor Cesar Victora, Centro de Pesquisas Epidemiologicas, Universidade Federal de Pelotas, Pelotas, RS, Brazil.

1. Dr Jean Claude Lowe, Ministry of Public Health, Cameroon. 1991. Health worker attitudes towards breastfeeding.

2. Martines, J C, 1985. The interrelations between feeding mode, malnutrition and diarrhoea morbidity in early infancy among the

What is exclusive breastfeeding?

In order to measure breastfeeding practices, including exclusive breastfeeding, in a standard way, definitions have been agreed. Exclusive breastfeeding is when an infant receives only breastmilk from his or her mother (or a wet-nurse, or expressed breastmilk), and no other liquids or solids.

The following are key to establishing 'exclusive breastfeeding':

- starting to breastfeed within an hour after birth – this ensures that the infant receives colostrum (thicker, yellowish milk produced during the first few days after delivery) as well as breastmilk;
- not giving any prelacteal drinks (any drink given before the first breastfeed), including water, 'holy' or ritually blessed water, sugar or glucose water, herbal teas or other fluids before the first breastfeed;
- breastfeeding frequently, day and night;
- not giving any other food or fluids such as water or infant formula during the first four to six months (until food is introduced between four and six months in addition to breastmilk).

Note: An exclusively breastfed child under six months old who develops diarrhoea needs extra fluids to prevent dehydration. WHO recommends that this be oral rehydration solution or clean water, in addition to frequent breastfeeding. Fluids that contain nutrients, such as rice water, gruel, etc. are not recommended. If possible, the infant should be seen by a health worker who is trained to give ORS solution. As soon as the diarrhoea stops, exclusive breastfeeding should be resumed.

urban poor in Southern Brazil. PhD dissertation, University of London.

3. Brown, K H, et al., 1989. Infant feeding practices and their relationship with diarrhoeal and other diseases in Huascar (Lima), Peru. *J. Ped.* 83:31-40.

4. Popkin, B M et al., 1990. Breastfeeding and diarrhoeal mortality. *J. Ped.* 86:874-82.

5. Victora, C G et al., 1987. Evidence for a strong protection of breastfeeding against infant deaths from infectious diseases in Brazil. *Lancet* 2:319-22.

Extra drinks are unnecessary

Mothers and health workers often believe that healthy infants need fluid supplements. Stina Almroth explains why extra drinks can do more harm than good.

Families and health workers give extra drinks to breastfed babies for many reasons. Sugar water is often given to prevent or treat constipation. Water is usually given in the belief that it is needed when the weather is hot. Some people believe that too frequent breastfeeding should be avoided and that it is good to give the baby something else, like water, in between breastfeeds. Herbal teas are sometimes given to prevent or treat a variety of ailments.

These beliefs may be understandable, but several studies have shown that extra fluids are not actually needed by healthy infants during the first half year if they are exclusively breastfed. Breastmilk does not make an infant constipated.

Provided that a baby is breastfed frequently to ensure that it gets enough milk, extra drinks are not necessary. People may think that babies, like adults, get thirsty and need extra water when it is hot. Physiologically this is not necessary¹. Breastmilk is a food and fluid uniquely

balanced for babies, with virtually no excess minerals and protein. Therefore the amount of waste products that need to be excreted in the urine is small, requiring very little water.

Even where the climate is very hot and dry and there is considerable water lost through evaporation from the skin and lungs, a healthy exclusively breastfed baby is not in danger of dehydration. Studies in many hot countries have shown that exclusively breastfed infants do not need extra fluids^{2,3}. The concentration of solutes in the urine of these infants was well below levels associated with inadequate fluid intake.

Giving babies glucose water during the first few days after birth has been a common hospital practice. It was thought that this helped to maintain the infant's body weight until the mother started to produce sufficient milk. A study in Australia has shown that babies who received only breastmilk lost less weight during the first few days than infants who received

supplements of glucose water⁴.

Many have assumed that water *supplements* breastmilk, whereas in fact water *replaces* it⁵. Naturally, babies grow better on breastmilk, which contains more than three times as much energy by volume as glucose water.

The message to breastfeed exclusively may seem simple, but promoting it effectively requires carefully designed communication strategies. We must learn what particular extra fluids are commonly given and why. Then our advice to avoid them can be more specific and more effective.

Stina Almroth, Selmedalsringen 8, 126 70 Hagersten, Sweden.

1. Almroth, S G, 1978. Water requirements of breastfed infants in a hot climate. *Am. J. Clin. Nutr.* 31:1154-57.
2. Almroth, S G and Bidinger, P D, 1990. No need for water supplementation in exclusively breastfed infants under hot and arid conditions. *Trans. R. Soc. Trop. Med. and Hygiene* 84: 602-604.
3. WHO/CDD, 1991. Breastfeeding and the use of water and teas. *CDD Update* no 9, August.
4. Glover, J and Sandilands, M, 1990. Supplementation of breastfeeding infants and weight loss in hospital. *J. Human Lactation* 6:163-166.
5. Sachdev, H P S, et al., 1991. Water supplementation in exclusively breastfed infants during summer in the tropics. *Lancet* 337:929-933.

Health workers: beliefs versus advice

Most health workers believe in the benefits of breastfeeding. But few actually recommend breastfeeding within an hour of birth, and few actually help mothers to establish and practise breastfeeding. This means that infants risk infections from other possibly contaminated fluids, and do not have the immediate post-partum protection provided by breastfeeding and colostrum.

Advice about giving prelacteal feeds, separation of mother and newborn, and delaying breastfeeding until 24 hours after delivery, are still very common.

- In **Senegal's** capital city, Dakar, although more than 80 per cent of health workers questioned believed that colostrum should be given to infants, only a quarter recommended that breastfeeding begin within two hours of birth. One third recommended that the mother wait as long as 24 hours. Sugar water, and 'holy water' were often given to infants before their first breastfeed.

- In **Kumasi, Ghana**, although all of 100 medically qualified midwives asked about infant feeding and giving water supplements¹ believed breastfeeding to be the best method of infant feeding, 75 per cent of them advised giving sugar and water or water alone before the first breastfeed.

Reasons given included: 'to prevent hypoglycaemia' (low blood sugar levels), 'to check the swallowing reflex', or 'to maintain a correct fluid balance'. Only a few said that infants did not need water at any time during the first few months. Most thought that water should be given to all infants on the first day of life, usually within six hours of birth.

A common belief is that the tongue must be cleansed with water after breastfeeding, to prevent oral thrush and that although breastmilk provides an infant with energy, water is essential for life.



Health workers play a crucial role in helping mothers to establish and practise breastfeeding.

1. Mackie, E, 1991. Water supplementation of breastfed infants in Ghana. *Letter in The Lancet*, vol 338: 251.

Low birth weight babies

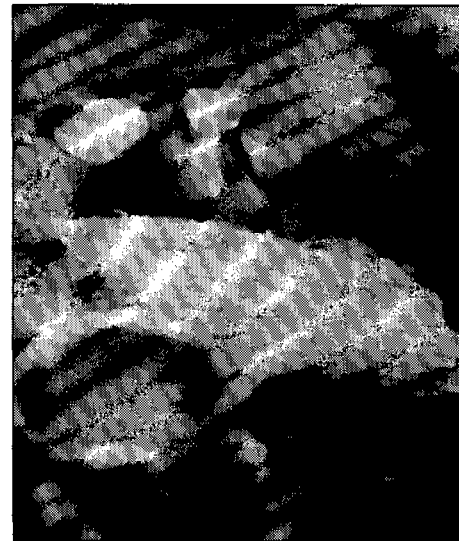
Children born with low birth weight are at high risk of malnutrition and frequent diarrhoea infections. *DD* explains why, and how to care for them.

Some 22 million low birth weight (LBW) babies are born in the world each year, most of them in less developed countries. These babies weigh under 2,500g at birth, rarely catch up in growth, and are likely to remain malnourished at least during their first four years of life¹. Low birth weight babies are more vulnerable to a range of infections, including acute respiratory infections and diarrhoeal diseases.

A study in Brazil² found that LBW infants are twice as likely to die from diarrhoea as babies weighing 2,500g or more at birth. Malnourished and well nourished children can have equal numbers of diarrhoeal episodes, but in less well nourished children these are more severe or prolonged.

Children of low weight, due to LBW or malnutrition, are also at higher risk of becoming dehydrated during a diarrhoea episode than children who weigh more. One possible explanation for this increased severity has been identified³. Infections in the proportionally greater intestinal surface area of small infants and children result in larger stool losses per kilogram of body weight.

- LBW babies should be exclusively breastfed during the first four to six months of life. Breastfeeding should also be continued well into the child's second year, as it protects from diarrhoea and other infections. This requires special efforts from health workers, as



If the baby cannot suck, it should be given expressed breastmilk.

Home treatment for infants with diarrhoea

Specific guidelines according to the infant's age and feeding status are:

1. If the infant is less than four to six months old and normally takes breastmilk alone, or with supplements of water or tea, advise the mother to:

- continue to breastfeed as frequently and for as long as the infant wants;
- give ORS solution, or if this is not possible, give plain water, 50-100ml after each loose stool; tea is not recommended.

2. If the infant is less than four to six months of age and normally takes animal milk or formula, with or without breastmilk, advise the mother to:

- continue to breastfeed as frequently and for as long as the infant wants;
- give the usual animal milk or formula, undiluted;
- give ORS solution or plain water.

3. If the infant is taking soft weaning foods, in addition to animal or formula milk and/or breastmilk, advise the mother to:

- continue to breastfeed as frequently and for as long as the infant wants;
- give the usual animal milk or formula, undiluted;

- give additional fluids such as ORS solution, rice water, yogurt drink, or plain water, 50-100ml after each loose stool;

- give the normal diet of soft nutritious weaning foods; if the child is over six months of age and not yet taking soft foods, these should start to be given.

Guidelines that apply to all infants, regardless of their age and feeding status:

- If it is not possible to give measured amounts of recommended fluids after each stool, advise the mother to give the child more fluid than usual, as much as the child will take.

- Special lactose-free or hydrolysed protein formulas should not be used routinely in place of the usual animal milk or formula; they are rarely required.

- Use a clean cup or spoon to give fluids to infants – not feeding bottles which are a source of infection.

All mothers should be taught to bring an infant with diarrhoea for treatment by a health worker, if it does not get better in three days or develops any of the following: many watery stools; repeated vomiting; marked thirst; eating or drinking poorly; fever; blood in the stool.

these babies are often weaned early⁴.

- Not all LBW babies can breastfeed. For very LBW babies (less than 1,500g) who are unable to suck, expressed breastmilk should be provided with a nasogastric tube or a cup and spoon.
- LBW babies with diarrhoea must be given oral rehydration therapy as soon as possible, as they can easily become dehydrated.
- Parents should seek medical care quickly if a LBW baby with diarrhoea shows any of the following signs: starts to pass many loose or watery stools; has repeated vomiting; becomes very thirsty; is sucking/nursing, eating or drinking poorly; develops a fever; has blood in the stool; or does not get better within three days.

Drs Fernando C Barros and Cesar Victora, Department of Social Medicine, Universidade Federal de Pelotas, Brazil, and Dr José C Martines, Diarrhoeal Diseases Control Programme, WHO, Geneva, Switzerland.

1. Barros, F C, et al., 1992. Determinants and consequences of prematurity and intrauterine growth retardation: a longitudinal study in Southern Brazil. *Paediatrics* (in press).

2. Victora, C G, et al., 1988. Influence of birth weight on mortality from infectious diseases: a case-control study. *Paediatrics* 81:807-811.

3. Victora, C G, et al., in press. Small body size as a simple indicator of the risk of dehydration among young children with diarrhoea.

4. Barros, F C, et al., 1986. Birth weight and duration of breastfeeding: are the beneficial effects of human milk being over-estimated? *Paediatrics* 78:656-61.

Facing up to the threat

DD provides guidelines for prevention and treatment.

In 1991, for the first time this century, cholera broke out in Latin America. It has been endemic in Africa since 1970. Now nearly half of the continent's 52 countries have reported cases. Cholera is also endemic in Asia and parts of the Middle East. Isolated cases have been identified in the USA and eastern Europe.

Cholera is treatable and preventable. In some countries only 1 per cent of all people with the disease have died, while in others the death rate has been much higher. Efforts to train health workers in early detection of cases and effective treatment, and to educate the public, are essential in every country at risk.

How to recognise cholera

Most cholera infections cause only mild symptoms, and the illness resembles other types of watery diarrhoea. The severe form of the disease occurs in only about 5 per cent of infected persons.

The signs of cholera are: frequent vomiting; large amounts of very watery diarrhoea which is straw-coloured and contains little faecal matter (known as 'rice-water' diarrhoea); and rapidly developing signs of severe dehydration due to the loss of large amounts of liquid stool fluid (up to 25 per cent of body weight in a day).

These signs are usually all that is needed to diagnose cholera, especially in children under than five years and adults. Precise laboratory diagnosis is not necessary to determine the best treatment.

How to treat cholera

- If there is severe dehydration, give Ringer's Lactate Solution intravenously: 30ml/kg in the first 30 minutes, and then 70ml/kg in the next 2½ hours (total IV fluid 100ml/kg).

- Replace ongoing losses of liquid stool with equal amounts of ORS solution by mouth; this may require 5-10ml of ORS solution per kg body weight each hour. If signs of dehydration recur, more ORS solution should be given. In patients with very high rates of stool loss, Ringer's Lactate Solution should be given intravenously until the rate of stool output diminishes.

- Treat severe cases with an appropriate oral antibiotic, such as tetracycline, when vomiting has stopped. **Adult dosage:** 500mg tetracycline four times per day for

three days *or* 300mg doxycycline in a single dose *or* 100mg furazolidone four times per day for three days, *or* 160mg trimethoprim and 800mg sulfamethoxazole twice a day for three days. **Child dosage:** tetracycline 12.5mg/kg four times a day for three days (tetracycline should not be given to children under 12 years of age) *or* (if local resistance) furazolidone 1.25mg/kg four times a day for three days *or* trimethoprim 5mg/kg and sulfamethoxazole 25mg/kg twice a day for three days.

- For patients with some dehydration, give ORS solution by mouth. During the first four hours give approximately:

under 4 months – 200ml to 400ml

4-11 months – 400ml to 600ml

1-4 years – 600ml to 1200ml

5-14 years – 1200ml to 2200ml

over 14 years – 2200ml to 4000ml

- When rehydration is complete and vomiting has stopped (usually 4-6 hours after treatment is started) encourage the patient to eat and drink – infants should continue to breastfeed.

Prevention in the home

Cholera is spread via the stools of people who are infected with the cholera organism; faecally contaminated water and food are especially important. The majority who are symptomless or have only mild diarrhoea can still spread the disease to others through faecal-oral transmission. Health workers and families can do much to reduce the risk of infection.

Safe food: food is contaminated during preparation or storage after cooking, by hands or water contaminated with cholera germs. Cholera vibrio can survive in food for up to five days.

- Wash hands before preparing food and after using the toilet.
- Cook food thoroughly.
- Eat cooked foods immediately.
- Store cooked foods carefully.
- Reheat cooked foods thoroughly.
- Wash fruits and vegetables with clean water, if they are to be eaten raw.
- Use clean, uncontaminated or boiled or chlorinated water to prepare and cook foods.

Water: use only clean potable water for drinking or washing food, or water that has been:

- disinfected with alum potash or chlorine;
- boiled (for up to five minutes); or
- collected as rainwater.

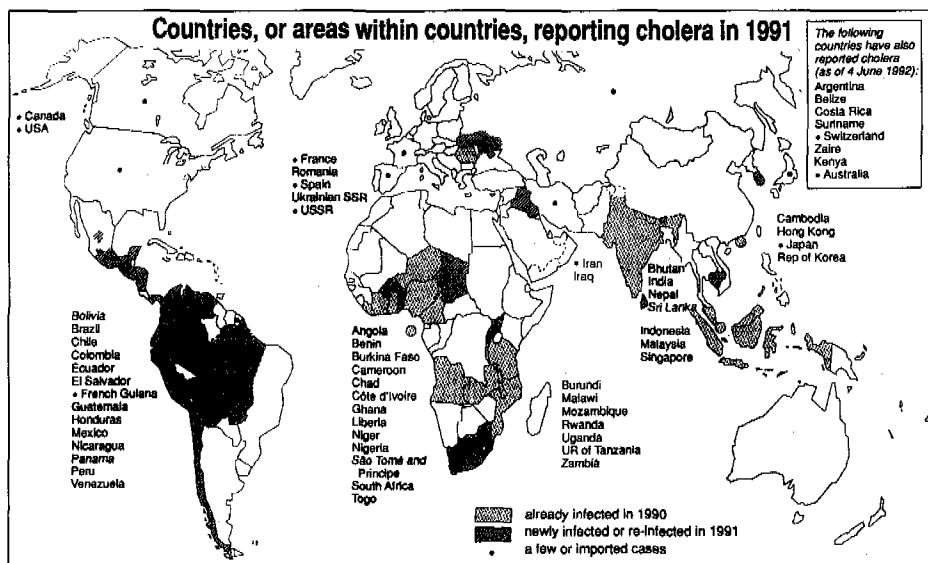
Store drinking water in a clean, covered container. To take water out, use a long-handled dipper that is not used for any other purpose.

Hygiene and waste disposal:

- If possible, wash kitchen dishes with soap, rinse with clean water and only use clean cloths to wipe dishes dry (if not, leave dishes to dry in the sun).
- Dispose of all excreta and faecally contaminated materials in a latrine or bury them if latrines are not available.

Sources: WHO, PAHO and ADDR materials.

The WHO cholera information pack is available from CDD/WHO, Geneva 27, 1211 Switzerland.



Low cost sewerage

Peter Kolsky describes circumstances where sewerage systems may be appropriate, and outlines the key issues to consider.

Safe disposal of domestic water and human waste plays an important role in the control of diarrhoeal diseases. Recent issues of *DD* have highlighted some practical aspects of water supply and sanitation for low-income and refugee communities. These have focused in particular on low-cost alternatives to conventional engineering methods for the disposal of human waste in rural and peri-urban areas. These low-cost alternatives (e.g. VIP latrines and pour-flush toilets with soakaways) cost much less than conventional sewerage, are much easier to build, and are easier to manage by individual families.

There are, however, some situations where sewers (pipes for removing used domestic water and human waste) are the most appropriate technology. For example, where water has been piped into houses in areas of high population density, some

form of piped sewerage is the only way to avoid flooding the area with sewage (the mix of used water and human wastes).

If domestic water use is high, people need a safe way to dispose of sewage. If a sewerage system does not exist, sewage flooding will spread faecal contamination.

In these circumstances, some form of sewer or septic tank will be more appropriate than latrines or pour-flush toilets. The choice between sewers and septic tanks is usually based on consideration of population density, soil conditions and cost.

Septic tanks

Septic tanks are simple systems that let the solids settle out of the waste water and sewage, before the liquid filters into the soil. Where population density is low, and where soils can absorb water easily (e.g.

sandy soils with a low groundwater level), some form of septic tank can provide a safe and economic means of sewage disposal. The tank itself does not treat the sewage, and the water flowing out of it is highly contaminated; it is the soil into which the contaminated water flows that does the real 'filtering' of the sewage. If the water coming out of a septic tank system cannot be absorbed by the soil (and therefore runs along the ground), it becomes a significant environmental health hazard and a septic tank is not an appropriate sewerage system. **Note:** septic tanks should not be sited too close to drinking water supplies and pipes, in case the pipes have breaks in them and drinking water becomes contaminated by sewage being absorbed by the soil in the surrounding area.

Sewers

Sewers are pipe systems that remove sewage from the home and neighbourhood. They should be considered where water use is high, and septic tanks cannot be used. Even where septic tanks are technically feasible, sewers may still be a cheaper or better option, depending upon the housing density, the local experience with sewers and septic tanks, and the wishes of the community.

Conventional sewers, as first developed in Europe and North America, are expensive; in 1978¹, they cost about US\$400/household/year. One of the main reasons they cost so much is because they are often quite deep, thus requiring a lot of excavation. They are deep for two reasons:

- the slope of the pipes must be relatively steep, so that the sediment from human waste moves and does not settle out and block the pipe; and
- pipes must be sufficiently deep (about 2 meter) to avoid being broken by car and lorry traffic on the ground above them.

Two different systems have been developed that save money by allowing sewers to be shallower.

Small bore sewers use a settling compartment, like a septic tank, outside each house to catch solids before they flow into the sewer. This means that the sewer pipe itself can be smaller and laid with a flatter slope, because it carries only the liquid, since solids have already been deposited in the tank. Such systems are most appropriate where septic tanks have already been installed.

Shallow sewers are like ordinary sewers in that they carry both the liquid and solid parts of the sewage. The sewers are shallow

Self-managed sanitation

The Orangi Pilot Project (OPP) is a non-government organisation working in Pakistan. Orangi is a large unplanned slum on the edge of the city of Karachi, with a population of 800,000. The OPP has undertaken a number of development projects, but is best known for its model of low-cost sanitation.

The project recognises development on two levels. *Internal development* consists of constructing sanitary latrines in the houses, sewerage lines in the lanes, and small sewerage collectors downstream of the lanes. The project's experience shows that local people, organised by lanes, can finance, manage, and maintain this internal development. *External development* consists of constructing large drains and collectors along main roads, main trunk sewers downstream of collectors, and treatment works, which the project believes is the responsibility of the government, and which local people cannot undertake. Integration of internal and external development is critical – the OPP and the Karachi Municipal Corporation have signed a contract to work together in the future.



The sewer built by local people.

At present, 70 per cent of the lanes in Orangi have underground sewerage lines built under this programme, and 345 'secondary' drains, downstream of the lane drains, have been constructed. This represents sanitation improvements for nearly 70,000 homes since 1980; and a dramatic impact on the immediate environment of slum dwellers in Orangi, at a fraction of the cost of government programmes.

Women take action

Amman Nagar (B) is a low-income community located in an abandoned water reservoir in Hyderabad, India. Because of the area's inherent drainage problems, recent slum-upgrading work in this community has included the construction of some large open drains, although it did not include sewers for each street. Nevertheless, a number of streets have sewers, funded by the residents themselves, which lead to the open drains.

In one of the lanes, the prime mover for this was a woman named Youssef Bi. Several years ago, her family built a twin-pit sanitation system, which she claims the municipality was supposed to clean out periodically. The municipality did not do so, but Youssef Bi did not complain; her family had no title to the land on which they were living and had no wish to attract attention to themselves. As a result, the toilet failed, and the system overflowed into the lane. Other houses had similar problems, with the result that the area was soon flooded with sewage. Youssef Bi went to the local slum improvement com-



Youssef Bi and her friends, and the sewer that they arranged to have constructed.



mittee (composed entirely of men) and asked them to consider building a sewer to connect to the open drain. They were more concerned, however, with other problems.

Undeterred, Youssef Bi talked to the women in the other twelve houses of her lane, and succeeded in obtaining a contribution of 500Rs (US\$25) from each to build a sewer. She contributed a little bit

more, and then hired a contractor to build the sewer; the job was done in two days. After their success, the lane on the opposite side of the open drain followed suit, and now four lanes have built their own sewers. They have had no blockages in eight months, but anticipate collecting 5Rs per household to cover the cost of unblocking the sewer, should that problem arise.

Photos: Peter Kolsky

because they are built where there is no vehicle traffic. Shallow sewers are often located in the back yards of houses to avoid traffic, or they may be placed under streets in communities where traffic is unlikely ever to be very heavy.

Community participation

At least as important as the development of lower cost technical solutions has been the evolution of community participation in low-cost sewerage. Traditionally, central authorities have taken responsibility for entire sewerage networks, on the basis that all drains up to the individual property boundaries are public property and that maintenance is best done by a single organisation.

In some areas, however, municipal authorities are beginning to think about devolving responsibility for small local sewers to community groups or non-government organisations. This can be done because the small branches are technically simple, and because they can be managed more closely by the community than by municipal authorities. The Orangi Pilot Project, and the stories of individuals such as Youssef Bi in slums without organised projects, show the potential for such efforts.

Sewerage checklist

1. Where does the waste go? A sewer for one street can create a problem for the neighbours if it is not planned properly.

2. Is the system technically feasible? Some help from the local sewerage board, if they are willing to break with traditional engineering standards, can save problems. Low-cost sewerage requires significant technical input from an engineer or technician. It also depends on availability of adequate water supply, the slope of the ground and the soil not being too rocky.

3. Is the plan socially feasible? A lot depends on how much the community wants sewerage, and whether it makes sense for them to manage the construction, as in Orangi, or whether they expect the municipality to do it. If people choose the community based option, it makes sense to start small and learn as you go.

4. Does the system fit together? A little work with levels at the beginning (with the help of trained engineers or technicians), and some knowledge of the plans of the sewerage board, can help assure that low-cost sewers from many streets fit together properly. Otherwise, upstream sewers may be unable to empty into downstream sewers that are too small or at a higher elevation.

5. Is it necessary? Other technologies (latrines, pour-flush toilets and soakaways) are cheaper, simpler and easier to implement. Sewers should only be considered where water consumption is high, and should be weighed carefully against septic tanks or similar soakaway systems, which may be simpler to organise, and can solve the problem locally.

Peter Kolsky, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, UK.

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Refrigerated SSS?

In teaching mothers about how to prepare home made salt and sugar solution, I advise them to throw it away after 24 hours to avoid contamination during storage. Some of them ask whether keeping the solution in the fridge would enable them to use it over a period of a few days. Is there any harm in doing this, and how long can SSS be stored in a fridge?

Saliso Sando, Environmental Health Officer, Ministry of Health, Katsina State, Nigeria.

Dr Nate Pierce, CDD/WHO, replies:

When SSS is kept at room temperature in warm climates it tends to spoil after 24 hours because of bacterial growth in the solution. Normally, any solution not used within 24 hours should be discarded and a fresh solution made. If the solution is kept in a fridge it will last longer, at least two days. It should not be necessary to keep the fluid longer than two days as the amount

prepared, usually one litre or less, would be used up within this time.

Treating cholera

There was a cholera epidemic in part of Nigeria last year. At the hospital where I work, most of the patients were prescribed tetracycline and phthalysulphathiazole, together with (mist) kaolin. Do you think this combination of antibiotics is necessary, as in most cases the cholera vibrio is sensitive to tetracycline? There was also little or no reduction in stool quantity in the patients treated with kaolin.

Oleyede Oyegbade, PO Box 367, Osogbo, Osun State, Nigeria.

Dr William Cutting replies:

Phthalysulphathiazole is a poorly absorbed sulphonamide, and can have toxic side effects. Studies have shown that the drug has no effect on cholera vibrio excretion. Tetracycline is one of the recommended drugs of choice for treating

cholera, and should be given without other antibiotics.

Clinical trials have shown that giving kaolin does not result in fewer stools or less fluid loss. The stools may look less watery, because the kaolin itself absorbs fluids in the gut, but it does not stop fluid loss from the body. As Mr Oyegbade points out, giving kaolin to cholera patients is of no benefit. Rehydration therapy is the most important part of treatment for cholera. An appropriate antibiotic, such as tetracycline, is helpful because it shortens the illness and reduces stool losses.

Future issues ...

DD50 will focus on training issues. DD51 will review evaluation of CDD activities. We would like to include readers' experiences and examples of what has worked and why, as well as what has not worked so well! Please send contributions for issue 51 by 13 September.

The following are references for the studies cited in the Persistent Diarrhoea insert in DD48.

Table 1: Indonesia¹, Guatemala², Peru^{3,4}, Peru⁵, Bangladesh^{6,7}, Bangladesh⁸, Bangladesh⁹, India¹⁰.

Table 2: India¹⁰, Nepal¹¹, Peru⁵, Bangladesh⁸, Bangladesh⁹, Bangladesh¹², Brazil¹³.

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How can I keep myself safe?

Your body will start to change as you grow older, and you may have new feelings about your friends. This is normal, but you must also learn to understand and control your feelings. Talking about the problem with your family and teachers may help. Remember, having sex now might kill you later! But you will be **SAFE** from **AIDS** if you wait until you are married before you have sex, and the person you marry does the same, and after marriage you sleep only with each other.

Now is the time for **YOU** to decide to keep yourself **SAFE** from this dangerous disease, for the rest of your life. Many grown-ups in Zambia and all over the world are already infected, some of them are ill and have died of this disease. Even those infected people who still look well should never have children, they should be very careful so as not to give the infection to other people by sex or giving blood, and they know they could in the future get ill and die. This is a very big problem for our world and our country; try to make sure that **YOU** are part of the **answer**, not part of the problem.

You cannot tell by looking at someone if they are infected, so for safety stick to one rule:-

NO SEX BEFORE MARRIAGE

But remember, if you know someone who is infected or ill with **AIDS**, do not be afraid of them. It is **safe** for you to shake hands, talk with them, play together and so on. They may be very sad and frightened; we must all learn to be kind and help them as much as we can.

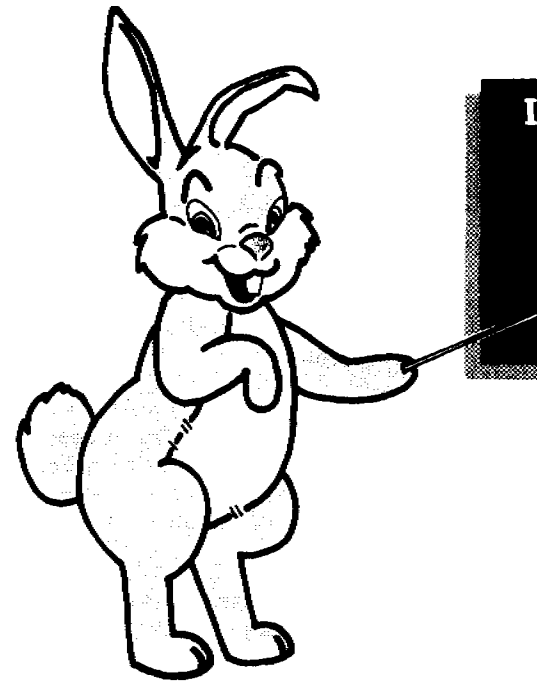
If you have any questions, ask your teachers, your relatives, your church leaders or local health workers, or write to the Health Education Unit, P.O. Box 30205, Lusaka.

Acknowledgements to:-
Dr. K. Baker MBChB., MRCPG

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AIDS facts for Primary School Grades 5—7.

To be given free to students and teachers.

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What is AIDS?

AIDS is a disease caused by tiny germs called 'AIDS viruses' or 'HIV'. People who are infected with these germs may look fine for years, but in the end many of them start to get ill. Some of them get very ill and even die.

There is no medicine yet for this dangerous disease because it is a new disease in the world. Maybe when you grow up there will be injections to help keep you safe from this disease or medicine to cure it, but until then you must:- **LEARN ABOUT AIDS SO YOU CAN KEEP YOURSELF SAFE.**

People who are infected or ill with AIDS are not bewitched and there is no known traditional medicine that can prevent or cure this disease.

How does AIDS spread?


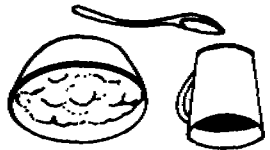
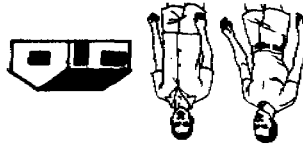










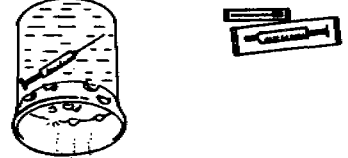
The AIDS virus (HIV) spreads from one person to another mostly by sexual intercourse (sex).

If one of the two people having sex is infected with the AIDS virus it can spread to the other person. Sex is only meant for grown-ups who are married. Young people should avoid having sex before marriage. This is to stop girls getting pregnant before they are ready to have a baby, and to stop both boys and girls catching serious diseases. Many diseases can be cured but the new disease AIDS cannot be cured — and it could kill you.

AIDS is sometimes spread in other ways. If someone needs a blood transfusion, blood given by another person is put into their bodies through a needle. If this blood is infected with the AIDS virus, the person who gets the blood could also get the infection. These days, blood is tested before it is given to someone else, and infected blood is thrown away. So if you ever need a blood transfusion, do not worry.

If a woman is infected with the AIDS virus and then has a baby, the baby may be born already infected with the germs. These babies get very ill and may die.

AIDS might sometimes be spread by mixing blood. Never stick dirty pins, razor blades etc. which might have someone else's blood on them into your skin. If you get hurt while playing and you are bleeding, wash the hurt part and ask for a plaster or bandage to cover it, or use a clean piece of cloth. If you get someone else's blood on your skin, wash it off straight away.

 <p>Mosquito bites</p>	 <p>Sharing cups and plates, knives and forks</p>	 <p>Living with a parent or relative who has AIDS</p>
 <p>Shaking hands or touching people</p>	 <p>Having your hair cut</p>	 <p>Eating and drinking</p>
 <p>Wearing second hand clothes (Salala)</p>	 <p>Looking after animals</p>	 <p>Sitting next to someone who is infected</p>
 <p>Sharing a toilet or bath tub</p>	 <p>Playing with someone who is infected</p>	 <p>Coughing, sneezing or talking</p>
 <p>Swimming in a swimming pool or river</p>		 <p>Having an injection with a new or clean needle and syringe</p>

You cannot get AIDS by:-

What is safe? Many people are worried about getting AIDS. Most of their worries are not necessary.