People and schistosomiasis in seventy-four developing countries.

The story begins either where people cause or where they catch schistosomiasis. It ends when the worms (whose eggs make people ill) are killed. The arrows show the three main points of attack on the disease. For more information about schistosomiasis control, and hints on how to use this poster, see overleaf.

WORLD HEALTH ORGANIZATION
Parasitic Diseases Programme 1985

Designed by Ruth Garrow
AVAILABLE FROM WHO

For any of the following, please write to: Parasitic Diseases Programme, WHO, 1211 Geneva 27, Switzerland.

Summarizes the global impact of man-made water resource development projects; includes an extensive bibliography.

A Strategy of Mortality Reduction in Schistosomiasis (P/83.36). English, French and Arabic.
An up-to-date current thinking about a crucial strategy for control of schistosomiasis, rather than eradication.

The Prevention of Bladder Cancer: An Integrated Approach through Control of Schistosomiasis (P/83.73 and P/83.10). English, French and Arabic.
Bladder cancer associated with schistosomiasis is a severe problem in some countries. The paper reviews the rationale for preventing this type of bladder cancer by control of schistosomiasis.

Water Resources Development and Health: A Selected Bibliography, by J. Deom (PDP/82.2). English and French.
Includes documents and publications on the effects of water resources development projects on health in the widest sense. 1250 references are cited, up to 1980.

The WHO Expert Committee of 1978 prepared this update report on control of schistosomiasis. The most recent WHO Expert Committee met in November 1984 and its report will be available by early 1986.

Diagnostic Techniques for Schistosomiasis (P/83.3 and P/83.4). English, French, Arabic, Spanish and Portuguese.
Illustrated descriptions of recommended parasitological diagnostic techniques for urinary and intestinal schistosomiasis.

Will consist of 55 high-quality topographic relief maps on 5-colour chromographs presenting information on schistosomiasis in 74 endemic countries, with tables and references.

FROM OTHER SOURCES

For any of the following, please do not write to WHO, but to the addresses indicated after each item.

Publications

Schisto Update, a quarterly bibliography. English only. Published by the Edna McConnell Clark Foundation in cooperation with the US National Library of Medicine, using the MEDLARS data base. Free from the Edna McConnell Clark Foundation, 250 Park Avenue, New York 10017, USA.


Bilharzia.


Films

Bilharzia can be cured. 1984. English only. 16mm, optical sound, colour. Newest film available.
Enquiries to: Bayer AG, Pharma Product Management, PMAA, 5090 Leverkusen, Federal Republic of Germany.

Schistosomiasis, 1971. English, French and German. 16 mm, optical sound, colour, 43 minutes, ref. no. 5P23.
Enquiries to: Ciba-Geigy SA, Pharma Suisse, Case postale, 4002 Basle, Switzerland.

The Life Cycle of Schistosoma Mansoni, 1983. English only. 16mm film or videocassette (all formats), 30 minutes.
Price: $180 (videocassette) or £375 (film). Enquiries/orders to: Mr Mike Thompson (PAC 11), Shell Film Unit, Shell International Petroleum Company, Shell Centre, Waterlo, London SE1 7NA, UK.

The Threat in the Water, 1986. English, Arabic, Portuguese, Danish, Dutch, Finnish, French, German, Mandarin, Spanish and Swedish. 16mm, optical sound, colour, 30 minutes.
Enquiries to: Mr Mike Thompson (PAC 11), Shell Film Unit, Shell International Petroleum Company, Shell Centre, Waterlo, London SE1 7NA, UK.

Slides

MEDDIA—International Slidebank on Tropical Diseases, No. 1—Schistosomiasis. In microfiche or filmstrip form. Accompanying text in English, French or Spanish.
Slides for students and intermediate-level health workers. Co-produced by Royal Tropical Institute, Amsterdam, the London School of Hygiene and Tropical Medicine, UK, and WHO.
To purchase, write to: Dr H. R. Floer, Royal Tropical Institute, Mauritskade 63, 1092 AD Amsterdam, Netherlands.

TALC Slide Set on Schistosomiasis. Teaching series of 24 colour slides on diagnostic techniques. Accompanying script in English only.
Price: £1.80, including postage. To purchase, write to: Teaching Aids at Low Cost, P.O. Box 49, St Albans, Herts AL1 4AX, UK.
Sanitation and water supply

This is the simplest solution to stopping schistosomiasis. If people built latrines and used them, they would not contaminate the water. It is important for children to learn to use latrines and not to urinate or defecate in the water. If every child used latrines, then all could swim with no danger of getting schistosomiasis. Good village water supplies with pumps and pipes help people to stay away from water that has been contaminated.

Health education and planning

People are not usually aware that they cause schistosomiasis, nor do they realise how they get it. Once they know these things, they also need to know what they can do to stop schistosomiasis. They can best understand this if it is explained in their own language by people who know how to deal with the disease. Agricultural development is important because it helps provide more food. Irrigation projects, small reservoirs and lakes—which contribute to agricultural development—must be carefully planned. Schistosomiasis should be controlled and the people educated about schistosomiasis, right from the start—before the problem of schistosomiasis gets too big to handle.

Snail control

Chemicals are available to kill snails. In general, they are expensive and require very skilled people to use them in the water. Snails know how to bury themselves and escape the chemicals, and the chemicals have to be applied many times over. A much simpler way to help control snails is to remove vegetation. People can remove plants from places where children swim in the water, or where women bring their children when washing clothes or dishes. The snails grow well on the plants; without plants, they cannot thrive.

People cause schistosomiasis

People are responsible for their own disease. The worms which cause urinary schistosomiasis live in the blood vessels around the bladder; mother worms produce eggs, which are found in the urine. In children, most of the time these eggs are mixed with blood. The worms which cause intestinal schistosomiasis live in the blood vessels around the intestines, and mother worms produce eggs which are found in the faeces. About half of the eggs produced by the mother worms stay in the body and damage the liver (in intestinal schistosomiasis) or the bladder or kidneys (in urinary schistosomiasis).

If the eggs which leave the body reach fresh water, a tiny fast-moving parasite (a miracidium) leaves each egg by breaking the egg's shell, and swims about in the water. It must find and enter a snail so that it can continue to grow. Inside the snail the single parasite multiplies into thousands of fork-tailed parasites ( cercariae); they escape after four to seven weeks into the water.

Examination and treatment

The examination to find out if you are infected is a simple matter: a small sample of your urine or faeces can be looked at under the microscope very quickly. If there are eggs of the mother worm in your sample, you should be treated. In schools, all children should checked once a year. If urinary schistosomiasis is in the area, schoolteachers can check their classes to see how many children have blood in their urine. Children with an obvious illness may have schistosomiasis, and will need treatment.

New drugs—safe and effective—kill the worms which cause schistosomiasis. Once the worms are killed, they stop producing the eggs which damage various parts of the body and make people ill.