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The control of schistosomiasis

Report of a WHO
Expert Committee

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Geneva, 8–13 November 1984

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THE CONTROL OF SCHISTOSOMIASIS

Report of a WHO Expert Committee

A WHO Expert Committee on the Control of Schistosomiasis met in Geneva from 8 to 13 November 1984. Dr S.K. Litvinov, Assistant Director-General, opened the meeting on behalf of the Director-General.

INTRODUCTION

During the five years since the meeting of the WHO Expert Committee on the Epidemiology and Control of Schistosomiasis (19) there have been changes in the priorities and operational approaches adopted, since the immediate aim is now to control the morbidity due to schistosomiasis rather than to control its transmission. Advances have occurred in parasitological diagnostic techniques, chemotherapy, and our understanding of the human ecology and epidemiology of schistosomiasis, and this new knowledge is being incorporated into national control programmes.

Programmes to eradicate schistosomiasis or eliminate its transmission by multiple, integrated, intervention techniques are proving to be beyond the human and financial resources of most endemic countries and the objectives of such programmes will only be achieved in the long-term. However, a reduction in disease due to schistosomiasis is now a feasible objective that is based on sound epidemiological principles and it is an objective that can be achieved within the limitations of most endemic countries. Since the epidemiology of schistosomiasis varies from one endemic country to another, the managerial and operational structures of schistosomiasis control programmes will also vary. The simplicity of the diagnostic techniques, the safety and ease of administering oral anti-schistosomal drugs, the use of snail control measures based on specific epidemiological criteria, and precise methods of data collection and analysis, mean that schistosomiasis control activities can be adapted to suit any level of the health care delivery system. In primary health care programmes, it can now be safely anticipated that schistosomiasis control activities to reduce morbidity will be successful.

The strategy of morbidity control focuses on the population of an endemic country. Schistosomiasis is caused by the insanitary habits of man. Schistosomiasis is acquired by man as he performs necessary daily activities associated with fresh water—working, bathing, washing, fishing, and recreation. The disease condition related to schistosomiasis is caused by heavy infections. Health education as part of morbidity control is important in helping the population to modify behaviour to prevent the disease, to understand the meaning of health in contrast to disease, to recognize the symptoms of schistosomiasis, and to use appropriately the available health facilities; health education should also encourage community involvement in control programmes with a view to social action.

The success of intervention measures that have a direct impact on morbidity such as chemotherapy, water supply and sanitation, environmental management, and environmental modification all require the active participation of the population. The new approach to schistosomiasis control emphasizes collaboration and implementation at the primary health care level in preference to the combined use of different intervention methods.

The Expert Committee recognized that the organizational, managerial, and operational aspects of control are the major areas where progress can be made in the future.

This report stresses the importance and feasibility of reducing morbidity in schistosomiasis control programmes using available methods and resources.

1. EPIDEMIOLOGY

1.1 The parasite

Much of the recent work on the taxonomy of schistosome parasites has focused on the use of experimental methods to assist in the characterization of species and strains. The need to define and identify accurately schistosome genotypes has stimulated this research. Many observations, both in the field and in the laboratory, have shown that strains of a single species from different geographical areas may display marked differences in their biological characteristics, implying that genetic diversity exists within the genus *Schistosoma*.

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