What Should Schools Do About Malaria?

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Washington, DC, USA
November 1999

Roll Back Malaria (RBM) is a partnership, including WHO, UNICEF, UNDP and the World Bank, which aims to halve the global malaria mortality burden by the year 2010. The World Bank is a partner in this initiative not only through its support to governments for implementation, but also through the Roll Back Malaria Institute in Africa, working across sectors. An intersectoral approach to rolling back malaria is likely to be more sustainable and cost-effective, and the RBM team at the World Bank is already working with the infrastructure and environment sectors to explore opportunities for concerted action.

From an Education Sector perspective, school health programmes aim to improve learning and educational outcomes through enhanced health and nutrition. By this definition, is malaria a priority problem for the Education Sector? And if control is justified, is it the education service – the school, the teachers – a good or appropriate means for health promotion or health service delivery?

The Education Sector already recognizes the importance of health to schoolchildren. The child-friendly schools of WHO and the International School Health Initiative of the World Bank, are all part of global efforts to improve educational outcomes and access to health facilities, as defined in the Education for All initiative taken forward by UNICEF. But whether school health, hygiene and nutrition programmes should contribute to malaria control, and how they might do this, have not been fully explored.

A seminar was held to initiate the process of clarifying the role of the education sector in malaria control. Box 1 details the conclusions that provide an evidence-based agenda for future debate and research, but which also serve as a framework for developing countriespecific strategies.

Box 1. Clarifying the Role of the Education Sector in Malaria Control

The conclusions from the seminar serve as a framework for developing country-specific strategies.

How important is malaria in schoolchildren?

For the health sector in Africa, the priority age group is younger than school age. Schoolchildren suffer much less mortality and morbidity, although the pregnant schoolgirl may be an exception to this generality. In areas of unstable transmission, disease may be more significant in schoolchildren, but is infrequent. For the education sector in Africa, malaria is of substantial importance with regard to Early Child Development Programmes. In schoolchildren, malaria represents 3-8% of all cause absenteeism, and up to 50% of readily preventable absenteeism. Mortality is low in schoolchildren, but 15-20% is because of malaria. Prevention of early malaria may be important to the educational achievement of children at school age.

For both sectors in Asia, schoolchildren are significantly affected by malaria in endemic areas and are a priority group.

What can schools do about malaria?

Children can be important agents for change. Health education through schools can help promote a community-wide understanding of malaria and the need for control can create a demand for health services both private and public to provide universal access to affordable and appropriate treatment. Skills-based health education can promote the prevention of disease by encouraging the use of impregnated bednets and the recognition of environmental risks. Schools can serve as the community focus for synchronized impregnation of bednets. The adoption by children of lifelong healthy behaviours can benefit not only the individual, but also the next generation of children.

Options

The management of treatment by and in schools appears an unaffordable and unattractive option. However, the promotion by schools of prompt and effective presumptive treatment provides an affordable option. Skills-based health education can give children the ability to recognize the signs and symptoms of malaria, to recognize the need to seek treatment, and to differentiate symptoms from curative treatment. Skills-based approaches already target early programmes and reproductive health and this box should now include messages repeating the specific risks of malaria in early pregnancy.

The education sector necessarily requires an effective partnership with the health sector to achieve full impact. It is the health sector that retains overall responsibility for malaria control, and for the technical content of all advice and actions through schools. There is a particular need for consistent drug policies that promote universal access to affordable and appropriate treatment. A policy that was able to promote a single, readily recognizable ‘malaria treatment’ that was readily available from multiple sources would greatly simplify the task of promoting prompt and effective presumptive treatment.
News

Researchers at the World Health Organization and the World Bank have collaborated on a study examining the impact of malaria on schoolchildren in Kenya. The study found that the malaria daily absence rate was 0.2%, representing 0.5% of all cases of absence. The number of schooldays lost was <1 day per child per year. This contrasted with areas of low seasonal transmission in Senegal where a similar incidence was observed in all age groups, with incidence varying according to the season of year. The average daily absence rate was 0.2%, representing <5% of all cases of absence. The number of schooldays lost was 0.2–1 day per child per year.1,6

Christine Luxemburger (Snooko Malari Research Unit and Oxford-Mahidol Tropical Medicine Research Programme, Thailand), supported by the Wellcome Trust, UK, presented data on malaria in schoolchildren in Thailand and Vietnam – a very different picture from Africa. In these countries, Plasmodium falciparum and P. vivax are coendemic; parasite transmission is low and unstable, with many areas malaria free. Her analysis of malaria in Thailand focused upon the Karen refugee camp population (100,000) on the Thai-Myanmar border. In this population, malaria is common and severe across all age groups. The mortality rate in schoolchildren is 3 per 1000 children and 2.7% of malaria deaths occur in schoolchildren. Children experience 1.2 new infections per attack that result in 1–7 febrile malaria episodes (counting recrudescences and relapses). Children are absent from school for 2–3 days per attack. In Vietnam, prevalence surveys indicate that schoolchildren are more exposed to malaria than younger children and represent an important proportion of malaria cases.7

Acknowledgements

The seminar, held in Washington, DC, 29 November 1999, was hosted jointly by the International School Health and RBM teams at the World Bank.

References


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