



Learning Brief

In focus: Malaria Prevention and Control

Integrating malaria education into primary school activities

Key Findings

- > Educational and participatory malaria sessions in schools are feasible, providing an alternative source for increasing the knowledge of both pupils and teachers.
- > Opportunities exist, but to institutionalise these types of programmes in a sustainable way, more resources are needed in the education sector.
- > Improved coordination linkages are required between the health and education sectors to maximise the effectiveness of the programme.

This learning brief is part of a broader project documentation exercise; to read more and other lessons learnt, go to:

<http://www.malariaconsortium.org/projects/malaria-prevention-and-control-project>

Introduction

In Africa, malaria accounts for up to 50 percent of all deaths among school-age children, representing an estimated 214,000 deaths per year in 2009. Studies indicate that malaria is also responsible for 50 percent of all preventable school absences, equivalent to 4-10 million lost school days per year (LSHTM, 2009).

When the burden of malaria is reduced, children can attend school more regularly, learn more effectively and develop better life skills. Ensuring that children learn about malaria prevention practices will not only help to reduce malaria but also contribute to disease control in their communities. Indeed, school children are increasingly being recognised as change-agents who can promote appropriate malaria behaviour in their communities (Ayi, 2010).

In Mozambique, the Government has acknowledged the importance of children's health for better schooling outcomes. The Strategy for Disease Promotion and Prevention in School (MINED, 2010-2016) focused on HIV/AIDS, nutrition, respiratory infections, sexual abuse, environmental management and trauma. However, the strategy placed little emphasis on malaria within the school curriculum.

Under the Malaria Prevention and Control Project (2011-17), implemented in nine of the country's 11 provinces by a civil society consortium, one of the innovative interventions was to strengthen malaria education in the classroom.

Objectives

Malaria education activities in schools aimed to enrich the school health education curriculum package through the following specific objectives:

- > To provide teachers with the necessary skills to conduct malaria education activities for pupils in the classroom
- > To reach primary school children with interactive sessions to acquire basic knowledge on malaria transmission, signs and symptoms, malaria prevention methods, and the importance of timely care seeking.

It is expected that pupils will, in turn, share newly acquired knowledge with their parents, families, friends, neighbours and communities.

Intervention

Development of an attractive package

Malaria Consortium has developed a package of training and educational resources to assist teachers with integrating malaria education into the classroom. This includes the teacher training manual, flipchart and lesson plans.

The flipchart features pictorials, questions and key messages about malaria for use in the classroom, organised into 12 thematic sessions, lasting between 30 and 45 minutes each and aimed at pupils from grades four to seven.

The flipchart is a tool for the teacher. During the educational sessions, the teacher uses the flipchart to guide interactive discussions to stimulate students' interest in the topics, and encourage them to contribute their own experiences to enrich the sessions.

The lesson plans supports teachers in their exploration of the topics and have been adapted to suit the pedagogical methods and techniques used by the teachers in the classroom.

“The teaching materials used to transmit the messages to the students are excellent in terms of thematic content and language. They are very accessible and this has given very positive results. The students understand very well because the teachers transmit naturally.”

(School master teacher, Ilha de Moçambique District, Nampula Province, 2017).

“I was chosen to take part in the training and after that, I started to give the lessons on malaria to the pupils. I give lectures in the classroom and in public. Before the project arrived here, I was a victim of malaria through ignorance. But after I was trained, I became aware and started to use the mosquito net.”

(Primary school teacher, Nacala Porto District, Nampula Province, 2017).

Decentralised implementation strategy

Introducing this package in schools and training teachers required strengthening the coordination between the health and education sectors. This had been identified as a major gap in the Strategy for Disease Promotion and Prevention in Schools due to the lack of implementation and awareness of the strategy at a local level. Malaria Consortium therefore adopted a decentralised approach. This involved the consultation and signing of a memorandum of understanding with the Provincial Directorates of Education, situational analysis of school health activities for the identification of available conditions and resources, and the selection of schools and a training plan in coordination with the District Education Services (SDEJT).

Training

The teacher training lasts one day and explores the basics of malaria, transmission and prevention, malaria in pregnancy, the importance of timely care seeking, as well as techniques for using the flipchart and the lesson plans, and monitoring and evaluation tools.

In the provinces of Nampula and Niassa, under the responsibility of Malaria Consortium, a total of 1,682 teachers were trained in 667 schools, delivering information on prevention, control and treatment to approximately 31,289 students on a quarterly basis. After the training, teachers received quarterly supervision visits and support from the project field officers.

Results and lessons learnt

An engaging approach for the education sector

The partnership with the Provincial Education Directorates created an enabling environment for the coordination and implementation of activities between the District Education Services and the project teams. The district school health technicians participated actively in the planning and selection of the schools benefiting from the activities, and the schools provided classrooms for the training of teachers.

“Since the project started everything worked out well, the message was adhered to, the risk of contracting malaria decreased. We talked to the students and some parents and confirmed that they received the information from the teachers and the students. It would have been better if the project had covered all schools and all district’s teachers. But even so, we were able to help achieve one of the objectives of the project by reducing students’ dropout.”

(School Health Officer, Ngauma District, Niassa Province, 2017).



Teacher training, Mossuril District, Nampula Province, 2015

Teachers participated actively in training sessions and malaria education activities in the classroom, including developing weekly activity plans, and reporting monthly progress and activities to District Education Services and project field officers. In addition to the classroom activities, teachers also used the materials and shared their knowledge with parents and at community-level public sessions.

Increased knowledge among teachers and students

Data shows that educational activities in schools can contribute to the increased knowledge of both teachers and students. The results of pre- and post- tests administered during teacher training showed a significant increase in knowledge. For example the percentage of teachers who knew that malaria is transmitted by mosquitoes increased from 45 percent to 100 percent (Meconta, Nampula, 2015), and 73 percent to 100 percent (Memba, Nampula, 2015) in the pre- and post- tests respectively.

The results of a rapid survey carried out with students in grades six and seven in a district of Niassa Province (2017) indicated that more than 80 percent of students know how malaria is transmitted, know the signs and symptoms of malaria, and the effective methods of prevention.

In addition, schools have the potential to support malaria control at community-level through pupils passing on learning to their families, therefore becoming agents of change.

In a qualitative study conducted in 2016 in selected schools in Nampula and Niassa, most teachers reported that students share information received in the classroom with friends and family, a practice confirmed by the children themselves.

“ We talk to our parents about malaria ... We use the mosquito net and we teach our friends, and they use it. ”

(Focus group discussion with pupils, Cuamba District, Niassa Province, 2016).

“ From the solid knowledge we acquired in the training, and in turn passed on to the students and the community, this helped us to free ourselves from this life-threatening danger which is malaria disease. ”

(Primary school teacher, Nacala-Porto District, Nampula Province, 2017)

Reduction in school absenteeism

Although this project was not designed specifically to collect data on the impact of malaria prevention activities in reducing school absenteeism, teachers nevertheless reported their experiences. All testimonies, collected during a qualitative evaluation in 2017 from teachers in Nampula and Niassa, reported a reduction in malaria-based absenteeism (Malaria Consortium, 2017).

“ In general the project has brought many improvements, as the malaria rate has dropped. There were a lot of absences from students here at school. We now have a low dropout rate because students are healthier. Students now have more knowledge of malaria than before and in addition to sharing this information with the family, they know better how to prevent. ”

(Primary School Teacher, Chimbunila District, Niassa Province, 2017)

“ The project has brought many benefits to the school, the community, the students and to me too. It reduced the number of sick students greatly. Before, it was common for 7 to 8 students to be absent because of malaria, but now it does not happen anymore. Students behave better and have more knowledge. In conversation with some students, they said they use the mosquito net. This is a result of lectures in public and theaters we have done. ”

(Primary school teacher, Nacala Porto District, Nampula Province, 2017).

School-based malaria education activities in the classroom can reinforce other interventions at community level. The interviewed teachers consider that there are improvements in malaria prevention practices in the families of the students and attribute these changes both to the role of the teachers and to the activities carried out at the community level.

The challenges of institutionalising malaria education in schools

Although the project considered the education sector as a key player in school malaria education activities, the coordination, planning and implementation of project activities mainly involved the Ministry of Health at the national level.

The project supported coordination between the health and education sectors at the provincial and district level through integrated provincial-level visits to the districts. However, while district level education authorities are best placed to carry out regular monitoring and supervision of schools, the project did not include specific resources to support the school health department in the follow up and mentoring of teachers, which sometimes resulted in challenges in ownership of the programme.

While health education is theoretically part of the school curriculum, due to limited pedagogical resources available, the material is sometimes overlooked by teachers who perceive health education as an additional, non-compulsory activity and therefore expect to receive additional resources to carry out the activities in the classroom.

The mobility of teachers has not been utilised to expand the programme into new schools, and in some schools, the lack of systematic handover and knowledge transfer by teachers has created gaps in the continuity of activities.

Integrated supervision of activities involving the health and education sectors has contributed to the creation of synergies and intersectoral interaction at local levels. However, the project did not facilitate the inclusion of teachers in regular local coordination meetings as was the case for community groups, who met monthly with health facility staff to discuss progress and challenges. Similarly the District Education authorities were not systematically invited to quarterly malaria control programme review meetings, resulting in a lack of opportunities for the education sector to feel fully engaged. Operationalising the memorandum of understanding between the Ministries of Health and Education at all levels would require that such avenues be created to allow for the harmonisation of intersectoral plans, joint monitoring of activities, periodic feedback meetings, and sharing of activity reports.

Next steps

This project demonstrated the relevance and feasibility of integrating malaria education into the classroom, by providing teachers with tailored training and materials. It also confirmed that pupils can be an important resource to reinforce and complement other existing behaviour change strategies at community level.

However, in order to maximise the impact and ensure the sustainability of this approach, it is essential to strengthen the ownership of malaria educational activities by the education sector at all levels.

It is essential to place the District Education Services at the forefront of this intervention, giving them responsibility for the monitoring and support of trained teachers, and allocating them the necessary resources to conduct regular supervision visits of the school health component. This will be fundamental to change the perception held by some teachers that health education interventions are not part of their role, and will help to ensure that teachers contribute to the expansion of the programme to new schools and teachers.



A primary school teacher using the malaria flipchart with her pupils in the classroom, Chimbunila district, Niassa, Province, 2017

References

London School of Hygiene and Tropical Medicine: Malaria Control in Schools. A toolkit on effective education sector responses to malaria in Africa. December, 2009

Ayi I et al: School-based participatory health education for malaria control in Ghana: engaging children as health messengers. *Malaria Journal*, 2010, 9:98

Malaria Consortium: Auscultação rápida em algumas escolas abrangidas pelo Projecto de Prevenção e Controlo da Malaria nas Províncias de Nampula e Niassa, Maputo, 2016.

Malaria Consortium: Avaliação participativa das actividades de engajamento comunitário na prevenção e controlo da malária nas províncias de Nampula e Niassa, Relatório preliminar, Maputo, Dezembro 2017

MINED: Estratégia de promoção da saúde e prevenção de doença na comunidade escolar 2010-2016, Maputo 2010.

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The Malaria Prevention and Control project aims to support the efforts of the Mozambican government to reduce malaria throughout the country through scale up of prevention and control efforts with community involvement.

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