

School Health and Nutrition: An Overview

Successes and lessons learned from Mangochi District, Malawi, September 2008

BACKGROUND

Save the Children has been implementing a comprehensive School Health and Nutrition (SHN) program in Malawi for over ten years. During this time, we have gathered a wealth of experience on how to implement SHN successfully at the district and community levels. In 2007, Malawi's Ministry of Education launched a national SHN program that is currently rolling out across the country. Save the Children aims to share lessons learned from our SHN programs in Mangochi and Balaka districts to improve SHN programming in Malawi and in other African countries that are initiating SHN.

To this end, we have created eight briefs documenting the successes, challenges, and lessons learned from Save the Children's SHN program in Malawi. Seven briefs describe our experience with specific SHN interventions:

1. Bilharzia treatment in schools
2. Prevention of HIV/AIDS in young children through the *Cool Parent Guide*
3. School-based malaria treatment
4. Teacher peer counseling on HIV/AIDS
5. Vision and hearing screening in schools
6. Vitamin A and iron supplementation in schools
7. Improving water, sanitation, and hygiene behaviors in schools

The main goal of Save the Children's SHN program is to address all key health and nutrition problems that prevent children from fully participating in school. Save the Children follows the principles of the internationally recognized FRESH framework,¹ while drawing on the experience of nearly 20 other Save the Children-led SHN programs around the world. The program in Malawi is our oldest, initiated in 1998 in Mangochi district and in 2003 in Balaka district. We conducted baseline surveys in Mangochi and Balaka at program start-up. These surveys revealed that schoolchildren suffered from poor health and deficient nutrition, likely affecting their ability to attend school regularly and learn to their full potential.

Conditions found at baseline

Mangochi: 1998, Balaka: 2003

Children's health	Mangochi n=1200	Balaka n=1540
% with Bilharzia	36%	33%
% anemic	44%	39%
% stunted	49%	41%

School environment	Mangochi n=12 schools	Balaka n=40 schools
% with segregated latrines	54%	71%
% with potable water	42%	80%
% with hand-washing facilities	0%	0%

In both districts, a third of children suffered from bilharzia infection, though some coastal schools had rates of over 80 percent. Both districts saw anemia rates of 40 percent and even higher rates of stunting. Access to water and sanitation facilities at school was low, particularly in Mangochi. Hand-washing facilities were absent in both districts.²

Malaria is endemic in Malawi and particularly in Mangochi, where it is one of the most important health-related causes of school absenteeism. HIV/AIDS has become increasingly prevalent, putting children and teachers at risk and affecting the entire education system. On average, three teachers die every month in Mangochi. Other teachers are often absent due to the illness.

APPROACH

To address these problems, Save the Children initiated a SHN program in conjunction with a Basic Education program. We worked together with district health and education authorities, schools, and communities. Our goal was to support the Ministry of Education's efforts to



provide education for all by improving access to quality education. The SHN program contributes to this goal and includes four main elements: school-based health and nutrition services, promotion of healthy behaviors, safe school environment, and supportive community and school policies (see below).

The four main elements of Save the Children’s School Health & Nutrition program in Malawi

School-based health and nutrition services

- Bilharzia treatment once a year in coastal schools;
- Vitamin A and iron supplementation
- Pupil treatment kits to treat malaria and other common health problems
- Vision and hearing screening

Promotion of healthy behaviors

- School- and community-based health communication activities around HIV/AIDS, bilharzia, malaria, hygiene, and nutrition
- *Cool Parent Guides* to improve parent child communication around HIV/AIDS
- Teacher peer counseling on HIV/AIDS

Safe school environment

Provision of safe water and sanitation facilities at school and in communities.

Supportive community and school policies

Training of School and Community Committees on health and nutrition issues to support the above



Children perform their own plays in front of the school and community to raise awareness around key health issues.

COVERAGE

The program started with 39 schools in 1999 and expanded to 101 schools in Mangochi in 2001. In 2003, the program grew to include an additional 70 schools in Balaka. In 2006, we reached about 125,000 school-children. Since 2006, Save the Children has been gradually reducing its support, first in Balaka and now in Mangochi, as we prepare to move our programs to a new district. Our move coincides with the start of Malawi’s national SHN program, rolled out across the country in April 2007, and implemented by the Ministry of Education.

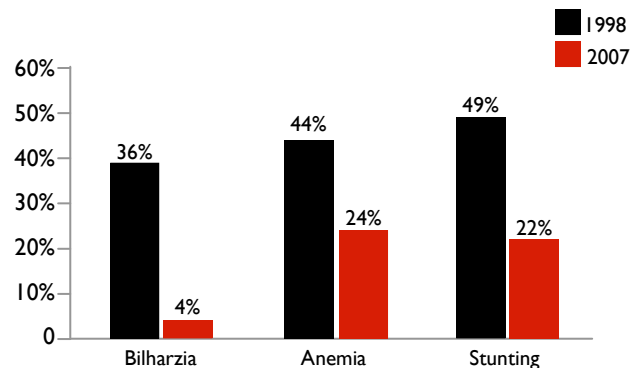
SUCSESSES

Save the Children conducted surveys in the same 12 schools in Mangochi in 1998 and 2007, using the same methodology. The surveys showed that children were substantially healthier in 2007 than they had been in 1998.³ The prevalence of bilharzia fell nearly 90 percent, likely a direct result of routine bilharzia treatment in schools. The prevalence of anemia and stunting is approximately half what it was in 1998.

The same surveys also show that the portion of students under age 15 who have had sex fell from 33 percent to 13 percent in Mangochi. Among boys, the rate dropped from 51 to 21 percent. The results also show that the average number of sexual partners in a student’s lifetime dropped from 4.1 in 1998 to 2.3 in 2007.³

An analysis of mortality data among schoolchildren in Mangochi prior to and after the introduction of Pupil

Prevalence of key health problems among schoolchildren in Mangochi n=1200



Treatment Kits for malaria found that malaria-specific mortality rates fell from 1.28 deaths per 1000 children to 0.44 deaths per 1000 children.⁴ In Balaka, more children said they sought treatment the last time they had malaria compared to baseline.⁵ Before the introduction of the kits, students reported having to buy medicines from shops, walk long distances to health facilities, and stay home for up to seven days until they recovered. After receiving treatment from the kits, students reported staying home a maximum of three days and, in many cases, returning to class the same day.

Unfortunately, without a comparison group, none of these results can be attributed to the SHN program directly. They may be linked to a number of different factors such as economic and agricultural trends and other Save the Children programs.

Save the Children examined student achievement data from 39 schools benefitting from our Basic Education and School Health and Nutrition programs and 63 comparison schools. Our comparison showed that children benefitting from our programs scored substantially higher on reading tests relative to the comparison schools (see below). Dropout, and to a lesser extent repetition rates, were also lower in schools with our programming.⁶ However, an analysis of District Education data during the same years showed no significant difference in dropout and repetition rates between schools benefitting from SHN and schools with no SHN program. The quality of the data was poor though, making it difficult to interpret.

Save the Children’s qualitative surveys in Balaka in 2006 and Mangochi in 2007 also provided valuable insight into

the positive impact of SHN programming on children’s lives. A student at Mpiniumodzi School reported, ““Had I not been screened [for vision] and assisted accordingly, I would have gone completely blind. My performance in class would have gone down greatly.” Female students at the same school noted, “When we are menstruating, we go to the latrines to tidy up ourselves and change sanitary towels. Before [when there were no separate latrines], we would stay home for three to four days...we could not answer questions during exams, especially on topics we had missed during the days of menstruation.”

CHALLENGES AND LESSONS LEARNED

While implementing our SHN program in Malawi, Save the Children encountered many challenges, most of which are described in the more detailed briefs. Most challenges were addressed effectively by communities and schools with the support of program and partner staff:

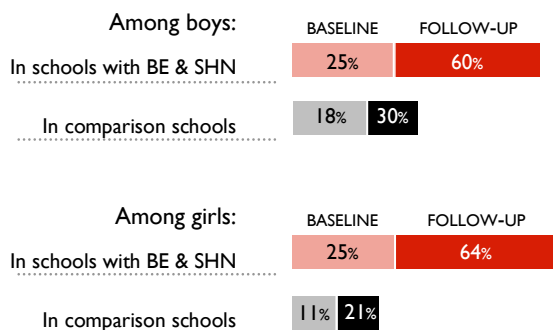
One of the greatest challenges was low school attendance. Children were absent from school for a variety of reasons including: initiation ceremonies; family illnesses that necessitated children’s labor at home; lack of resources or teachers in schools; and lack of interest from some children and parents who questioned the value of education. Low school attendance rates affect coverage and impact of SHN and other efforts to improve the education quality. However, the added value and benefits of SHN encouraged children to remain in school and gradually, after awareness and communication campaigns, communities and children now value education.

Despite a large improvement in health-related knowledge and reported behaviors, some key behaviors have been harder to change (e.g., regular hand-washing with soap or ash and condom use). A well-researched behavior change campaign targeting all population groups with appropriate and context-specific messages is needed.

Low literacy among some parents and community members was also challenging; some were unable to read health education materials (pamphlets, notes, and the *Cool Parent Guide*) or manage the supply and use of tablets.

Implementing SHN without a national SHN policy was another challenge. The Ministries of Education and Health were unable to provide strong support,

Reading test pass rates at baseline and follow-up



collaboration, and guidance. Fortunately, with the launch of the national Ministry of Education-led SHN program in 2007, the situation has improved considerably and each district now has SHN responsibilities and point persons for implementation

NEXT STEPS

Over the past decade, the health and nutrition status of schoolchildren in Mangochi has improved substantially. This overall improvement can be attributed partly to improved living conditions generally, which may be related to a large number of factors. However, Save the Children's programs, including our School Health and Nutrition program, likely played a role.

In September 2008, Save the Children's SHN and Basic Education programs phased out of Mangochi. However, with the launch of a national SHN program, many of our SHN activities will be taken up by the District Education Office. Others will not, but will hopefully continue with support from schools and communities, using existing materials and expertise.

Deworming, vitamin A and iron supplementation, and Pupil Treatment Kits are covered under the national SHN program and teachers have been trained to conduct these activities. However, the training provided by the government is much shorter than that given by Save the Children and the level of monitoring and school support is minimal. Supervisory visits in Zomba district by Save the Children found a number of problems, with trained teachers still unclear on distribution procedures (how many tablets to provide to whom, when). Maintaining quality and high levels of community participation is always difficult in large scale programs, but it is essential to ensure that minimum standards are met across the country. This relies on quality training programs and sensitization campaigns for stakeholders at all levels and a strong monitoring and supervision system to identify and resolve problems as they arise.

Essentials for program success

- SHN capacity building of staff and partners before launch to ensure consistent pre-defined standards and messages.
- Sensitization and participation of communities and schools in program design, implementation, and monitoring to ensure full support from stakeholders, including parents and children.
- A strong monitoring system and regular supervision to identify and resolve issues as they arise, along with monthly meetings with school and community representatives.

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Photos by Humphreys Kalengamaliro

References

- ¹FRESH: *Focusing Resources on Effective School Health*. FRESH is an international framework for SHN programming to which key agencies (including WHO, UNICEF, UNESCO and the World Bank) agreed at the Education for All forum in 2000.
- ²Save the Children (1999). *A baseline report for the SHN initiative in Mangochi District, Malawi*.
- ³Save the Children (2008). *SHN evaluation* (quantitative) [draft].
- ⁴Pasha et al (2003). The effect of providing Fansidar (sulfadoxine-pyrimethamine) in schools on mortality in school-age children in Malawi. *The Lancet*, 361(9357).
- ⁵Save the Children (2006). *Balaka phase-out survey report*. SHN.
- ⁶Save the Children (2005-2007). Basic Education data.



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