

Malaria

► **Appropriate treatment of children in the early stages of malaria can prevent progression to severe disease and save lives. A home management system in Burkina Faso involved the pre-packaging and selling of antimalarial drugs via trained village volunteers. In the four age groups tested, progression to severe malaria varied between 3-7.1% in children who received packaged drugs compared with 8.1-18.2% in the control group. In both groups, progression rates were highest in children aged 7-11 months, and lowest in children aged 4-6 years. Overall, reduction of progression in users of pre-packaged drugs was 53.6%.**

▶ A research team in Burkina Faso designed a strategy for the prompt and adequate home treatment of malaria that included re-training of health staff of the local health unit, information/sensitisation meetings and training sessions for all villages, and pre-packaged antimalarial drugs made available to homes through trained village volunteers. The drugs were provided in 4 different colour-coded packs for different age groups, (0-6, 7-11, 12-35 and 36-69 months) following the national treatment guidelines. Each pack contained a full course of treatment, and a label with pictorial instructions on how to administer the drugs. The village volunteer sold the packs at a price agreed with the local health management team, calculated to cover the purchase cost of the drugs and a 10% incentive margin for the volunteer. The aim was to increase access to treatment, to improve compliance with recommended dosages and to reduce progression of malaria to complicated forms of the disease, thus reducing the incidence of severe malaria. The impact of the strategy was assessed through case-control epidemiological methods. Some 375 villages participated in the study and at least one volunteer was trained in each village. Of the children that were treated by the village volunteers, 56% complied with the treatment over the correct duration. The rate of progression from uncomplicated malaria ("memalé") towards

complicated malaria ("benoyaba") was lower in children who were treated with pre-packaged antimalarials (5.1%) compared to those who were not treated with these drugs (11.0%) (OR 0.44, 95% CI 0.33-0.58, $P < 0.001$). The overall reduction of progression towards severe disease among users of pre-packaged treatment was 53.6%. In the four age groups, the progression rate to severe malaria varied between 3-7.1% in children who received pre-packaged drugs, and from 8.1-18.2% in the control group. In both groups, the highest progression rate was noted in children aged 7-11 months, and the lowest in children aged 4-6 years.

These results show the feasibility and some degree of effectiveness in the study site. The challenge now is to demonstrate the feasibility, sustainability, cost and effectiveness over time of this home treatment strategy on a much larger scale.

Home treatment of suspected malaria leads to a marked reduction in malaria morbidity and mortality. WHO has recommended the strategy as the most effective single measure for reducing malaria mortality, especially in children. ■

Reference:

Meeting Report: A focused research agenda to influence policy and practice in home management for malaria (8-11 May 2000) Kilifi, Kenya.
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Impact of early and appropriate treatment of childhood malaria/fevers on severe malaria in Burkina Faso

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