



Santé Education Habitat à Ouagadougou

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Une initiative visant à développer des services sociaux plus équitables

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HOUSEHOLD PRACTICES FOR PREVENTION AND MANAGEMENT OF MALARIA IN OUAGADOUGOU

Malaria is a leading cause of morbidity and mortality among children under five in Ouagadougou (see Note no. 11). Research has documented the impact and acceptability in rural settings of Burkina Faso of Insecticide Treated Materials (ITMs – bednets or curtains)^{1,2,3} and pre-packaged chloroquine⁴ to improve the home case management of simple malaria (see Note no. 12).



Findings from qualitative research conducted by Mwangaza Action in the pilot neighborhoods of Wemtenga (zoned) and Taabtenga (non-zoned) suggest that many residents share these conclusions. In a series of interviews, key informants in these neighborhoods cited malaria as their leading health problem. A large

number of these informants cited bednets as one of the most effective of all measures to prevent illness.

To document current home health practices in the city, the Ouagadougou Initiative conducted a survey in May 2002 of all households in the pilot neighborhoods of Wemtenga and Taabtenga having at least one child less than 5 years of age. The results suggest that there is room for major improvements.

Though research in Burkina Faso has proven that insecticide treated curtains can reduce under-five mortality by 14%, they are installed in less than 3% of households in Taabtenga and about 4% of households in Wemtenga.

Use of bednets is somewhat more common: 23% of children under-five in Wemtenga and 7.5% of those in Taabtenga had slept the previous night under a bednet. But only 8% of these bednets in Wemtenga and none of the bednets in Taabtenga had been treated with insecticide in the previous 12 months. The result: only 6% of children in Wemtenga and 3% of children in Taabtenga were protected with ITMs.

During the week before the survey, 61 of 491 children (12.4%) in Taabtenga and 26 of 157 children (16.5%) in Wemtenga had been ill with a fever. Care seeking outside of the home for these fevers is discussed in Note no. 5. Seventy five percent (46 of 61) of the child fevers in Taabtenga and 62% (16 of 26) of those in Wemtenga were treated at home with modern medicines without ever visiting a health facility. These modern medicines were purchased without a prescription either from pharmacies or from itinerant drug vendors⁵. Another 8% (5 of 61) of the febrile children in Taabtenga and another 15% (4 of 26) of those in Wemtenga were first treated this way at home but were subsequently taken to a health facility. Thirteen percent (8 of 61) of febrile children in Taabtenga and 23% (6 of 26) of those in Wemtenga were taken directly to a health facility for treatment without auto-medication. Only 2 of 61 children (3%) in Taabtenga and none of the febrile children in

¹ Habluetzel A. *et al.* 1997. Do insecticide-treated curtains reduce all-cause child mortality in Burkina Faso? *Trop. Med. Int. Health* 2(9) : 855-62

² Habluetzel A. *et al.* 1999. Insecticide-treated curtains reduce the prevalence and intensity of malaria infection in Burkina Faso. *Trop. Med. Int. Health* 4(8) : 557-64

³ TDR news. February 2001. Do insecticide-treated materials merely delay childhood mortality? <http://www.who.int/tdr/publications/tdrnews/news/news64/bednet.htm>

⁴ Sirima S.B. 2001. Pre-packaged antimalarials reduce progression to severe disease. TDR publications: <http://www.who.int/tdr/research/finalreps/no29.htm>

⁵ Or, in some cases the medicine was left over from that prescribed for a previous illness.

Wemtenga had their fevers managed without use of modern medicines.

Caretakers were asked to specify the medicines they had used in the last week to treat their febrile children. Only 86% (44 of 51) of febrile children receiving medications without prescription in Taabtenga and 71% (15 of 21) of those in Wemtenga received any anti-malarial⁶. Chloroquine was overwhelmingly the anti-malarial of choice: 43 of 44 children treated without a prescription with anti-malarials in Taabtenga and 13 of 15 children treated without a prescription with anti-malarials in Wemtenga were treated with chloroquine.

Finally, caretakers who reported treating a child's fever with chloroquine (including those who received a prescription for the treatment) were asked for how many days they had administered the drug. For only 48% (23 of 48) of the relevant cases in Taabtenga and 59% (10 of 17) of the relevant cases in Wemtenga did the caretakers answer appropriately that they had administered the chloroquine for 3 days. Thirty-five percent (17 of 48) of responses in Taabtenga and 29% (5 of 17) of those in Wemtenga indicated that the child had been treated with chloroquine for less than 3 days. Another 15% (7 of 48) of responses in Taabtenga and 12% (2 of 17) of responses in Wemtenga indicated that the child had been treated for more than 3 days.

Confusion was also widespread about the number of doses of chloroquine to give each day: 69% (33 of 48) of responses in Taabtenga and all 17 respondents in Wemtenga indicated that they had administered 2 or more doses of chloroquine each day.

From these findings some of the most remarkable conclusions are as follows:

1. *There is a high level of awareness in the pilot neighborhoods of the burden of malaria.*
2. *Use of bednets was the most frequently cited of all measures to prevent disease in these neighborhoods. In the more affluent*

⁶ Children received, as an alternative to anti-malarials, antibiotics and anti-pyretics (medications like aspirin and paracetamol that reduce a fever without treating the underlying cause).

neighborhood of Wemtenga, more than 20% of children slept under a bednet during the night before the survey.

3. *Yet, widespread awareness of malaria and some knowledge of how best to prevent it has yet to translate into use of effective preventive measure. In Taabtenga, few families have invested in the nets themselves. And in neither neighborhood were people used to retreating nets each 6 to 12 months.*
4. *The great majority of children with fever are treated at home with chloroquine bought without a prescription.*
5. *Yet at least 40% of caretakers don't know for how many days or how many times each day chloroquine should be administered.*
6. *A significant percentage of children with fever (17% in Taabtenga and 29% in Wemtenga) did not receive any anti-malarial at all.*



It is worth noting that the practices for prevention and management of malaria may differ during the rainy season when mosquito biting and malaria transmission are more intense, cooler nights make bednets more comfortable and it is possible that a higher percentage of fevers will result in severe malaria⁷. For this reason, plans are being developed to repeat the malaria component of the household survey during a period (August to October) of maximum malaria transmission.

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⁷ During the present survey no child was reported to have experienced coma or convulsions during the previous 4 weeks.