

Positive manipulation? Creating the market for ACTs

The Affordable Medicines Facility for malaria (AMFm) has tried through subsidies to move consumption to artemisinin combination therapies (ACTs) and drive other products from the market. Professor William Brieger observes the positives and negatives of this pioneering initiative

Getting the right malaria treatment on time has been a major challenge in the fight against this parasitic disease. Demographic and health surveys paint a serious problem as seen in the graph. Consequently, global and national malaria efforts have tried to devise various strategies to increase uptake of antimalarial drugs, with one of such being to make high-quality and appropriate anti-malarial medicines available to the public through various points of care and sale in a subsidised form.

An example of this subsidised approach was promoted by the Tropical Disease Research programme of the UNDP/World Bank/UNICEF/WHO. Teams in Nigeria, Ghana, Burkina Faso, and Uganda experimented between 1998 and 2001 with promotion and acceptability of age-specific prepackaged drugs (PPDs), chloroquine and cotrimoxazole, in order to provide (at that time) the appropriate treatment for febrile illnesses.¹

Baseline in Nigeria showed that medicine shops were a major source of malaria medicines,² and so the intervention there was designed to make the PPDs available at subsidised cost through medicine shops, village health workers, and frontline primary care clinics.³ On an individual basis, medicine shop owners have the best sales record, but as a group, most volunteer village health workers accounted for the bulk of medicines sold to the rural residents. A mixed approach was important, and with that the PPDs were responsible for an increased market share of appropriate malaria treatments.

Nigeria also experimented with providing quality and approved PPDs through the BASICS project working with patent medicine vendors (PMVs). An important finding was that the PMVs were capable of providing the correct age-specific dose and clients had learned to take these correctly.⁴ Over the years a variety of approaches to improving the ability and performance quality of PMVs in provision of malaria drugs have been tested ranging from basic training to franchising systems.⁵

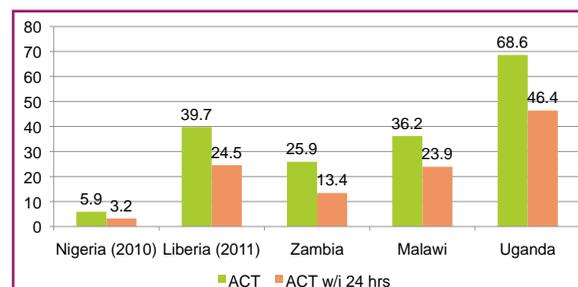
Professor William R Brieger is from the Department of International Health, The Johns Hopkins University Bloomberg School of Public Health; and is Senior Malaria Adviser for Jhpiego, an affiliate of the Johns Hopkins University.



A 'chemical seller' shop in Ghana selling AMFm medications with the green leaf logo (insert)

A concept emerged that provision of subsidised Quality Assured Artemisinin-based Combination Therapy drugs (QAACTs) in both public and private sectors in endemic countries could drive unapproved and unsafe antimalarials from the market. The Institute of Medicine opined in 2004 that, 'A global subsidy near the top of the distribution chain will stabilise demand and create incentives for ACT production, resulting in lower prices.'⁶ The Affordable Medicines Facility malaria (AMFm) eventually emerged in 2008, but not without skepticism from some donor countries and the scheme was formally launched in 2009.

The Global Fund to fight AIDS, TB and Malaria



ACT use by children below 5 years of age from demographic and malaria surveys



Non-ACTs from a drug shop in Nigeria

(GFATM) eventually agreed to house a 2-year pilot effort in eight countries: Cambodia, Ghana, Kenya, Madagascar, Niger, Nigeria, Uganda, and Tanzania. Approved first-line buyers of the subsidised ACTs were able to make their purchases for country programmes in early 2010. Adeyi and Atun⁷ explained the funding processes as follows: ‘AMFm has two funding streams. A first co-payment fund of US\$216 million – financed by the Bill & Melinda Gates Foundation, the UK Government, and UNITAID – covers the subsidies. A second allocation of US\$127 million from the Global Fund finances supporting interventions.’

A major evaluation of AMFm has been published for the first phase of its operation in the seven participating African countries.⁸ Key findings included:

- large increases in QAACT availability (25.8–51.9 percentage points) in five countries;
- market share increases (15.9–40.3 percentage points), driven mainly by changes in the private for-profit sector (5 countries);
- large falls in median price for QAACTs per adult equivalent dose were seen in the private for-profit sector in six pilots, ranging from US\$1.28 to \$4.82;
- decrease in the market share of oral artemisinin monotherapies in two countries.

Even though these initial survey results point in positive directions, skepticism remains. Critiques are concerned about equity.⁹ Even though AMFm medicines are available for both public and private sectors, the latter was more flexible and responsive to procurement and supply processes and thus some worried that the poor would be paying more for QAACTs in market settings that are often less than well supervised and regulated.

Concern was also expressed about the potential widespread use of ACTs without proper diagnostics (e.g. rapid diagnostic tests – RDTs). The fault for this problem is not inherent in AMFm since the malaria community for years has put emphasis on getting medicines out, and only recently been able to start meager dissemination in RDTs, even in the public sector.

The latest episode in the saga of AMFm has come in a press release from the Board of the GFATM which states that it will oversee the transition of the eight existing grants through 2013 and then provide a framework for endemic countries to include in their proposals plans for AMFm-type activities.¹⁰ In short, countries that want to continue or start the subsidisation of ACTs (and possible RDTs) will have a mechanism to incorporate this as part of their overall malaria case management initiatives.

Some see this move as a death knell for the AMFm concept, but it should be remembered that countries had already experimented with the idea prior to creation of AMFm. Nigeria, for example, piloted a scheme to provide subsidised ACTs through the Phase 2 of its GFATM Round 4 Malaria Grant.¹¹ Lessons learned from that experience included the fact that some PMVs were not interested in selling approved malaria drugs at prices lower than that of other antimalarials in their shops, even though they could still make a fair profit margin.

Now that the AMFm concept is available for all to try, more formative and operations research is needed moving forward to ensure that the effort to make life saving drugs available at a cost people can afford fits into the social and market realities of each country. Efforts are needed to include RDTs.

Finally, greater attention is needed to strengthen the private sector, not to exclude it. A key lesson from the revision of Nigeria’s GFATM Round 4 grant was that the public sector in many countries is capable of reaching only 50% of those in need. Better training and supervision of the available resource of medicine shops is a reasonable solution for saving lives.

References

1. Gyaopong M, Garshong B. *Special Programme for Research & Training in Tropical Diseases (TDR). Lessons learned in Home Management of Malaria: Implementation research in four African countries.* World Health Organization, Geneva, 2007.
2. Salako LA, Brieger WR, Afolabi BM, et al. Treatment of childhood fevers and other illnesses in three rural Nigerian communities. *Trop Pediatrics* 2001; 47: 38–46.
3. Brieger WR, Salako LA, Umeh RE, Agomo PU, Afolabi BM, Adeneye AK. Promoting Prepackaged Drugs for Prompt and Appropriate Treatment of Febrile Illnesses in Rural Nigerian Communities. *Int Q Comm Health Educ* 2001–02; 21: 19–40.
4. Salami KK, Brieger WR. Consumer response and satisfaction with prepackaged antimalarial drugs for children in Aba, Nigeria. *Int Q Comm Health Educ* 2005–06; 24: 213–27.
5. Goodman C, Brieger W, Unwin A, Mills A, Meek S, Greer G. Medicine sellers and malaria treatment in Sub-Saharan Africa: what do they do and how can their practice be improved? *Amer J Trop Med Hyg*, 2007; 77 (6 Suppl): 203–18.
6. Arrow KJ, Panosian C, Gelband H (eds), Committee on the Economics of Antimalarial Drugs. *Saving Lives, Buying Time: Economics of Malaria Drugs in an Age of Resistance.* National Academy of Sciences, 2004. <http://www.nap.edu/catalog/11017.html>.
7. Adeyi O, Atun R. Universal access to malaria medicines: innovation in financing and delivery. *Lancet* 2010; 376: 1869–71.
8. Tougher S (the ACTwatch Group), Ye Y, Amuasi JH, et al. Effect of the Affordable Medicines Facility – malaria (AMFm) on the availability, price, and market share of quality-assured artemisinin-based combination therapies in seven countries: a before-and-after analysis of outlet survey data. *Lancet online*, 2012. [http://dx.doi.org/10.1016/S0140-6736\(12\)61732-2](http://dx.doi.org/10.1016/S0140-6736(12)61732-2).
9. Gulland A. Cheap malaria drug is going to wrong people, says charity. *BMJ* 2012; 345: e7157.
10. Global Fund to fight AIDS, TB and Malaria. BOARD APPROVES INTEGRATION OF AMFm INTO CORE GLOBAL FUND GRANT PROCESSES. Geneva, 15 November 2012 http://www.theglobalfund.org/en/mediacenter/newsreleases/2012-11-15_Board_Approves_Integration_of_AMFm_into_Core_Global_Fund_Grant_Processes/.
11. Society for Family Health. Malaria Prevention and Treatment. Abuja, Nigeria: <http://www.sfnigeria.org/what-we-do/malaria-prevention-and-treatment>.

CPD Challenge

See page 52 to test yourself on this article