

Overview of malaria control activities and programme progress

Malaria is a major public health problem in Nigeria, with stable transmission throughout much of the country and with the largest population at risk in Africa. Coverage of the key RBM interventions remains unacceptably low.

Malaria control and finances are decentralized in Nigeria. At national level, with the collaboration of RBM partners, the emphasis is placed on development of key control policies and guidelines, allocation of resources and resource mobilization, and monitoring and supervision. State-level efforts are concerned with interpreting policy, resource mobilization, support and supervision for implementation, and establishing links between local government agencies and the NMCP. Local-level activities focus on resource mobilization and implementing community-based activities. All levels are involved in monitoring and evaluation. A country strategic plan of action for 2001–2005 was developed that outlines six priority areas for malaria control: (i) case management; (ii) prevention; (iii) information, education and communication materials and community mobilization; (iv) partnerships and overall health system development; (v) operational research; and (vi) monitoring and evaluation.

Activities since 2003 include coordination with many RBM partners, procurement of ACTs using funds from the GFATM and efficacy testing of ASU, AQ and ATM+LUM. An advocacy tool for sharing information on malaria progress and control was developed for influencing state policy-makers and for communicating current strategies and activities. Collaboration on an epidemic preparedness project is planned for the regions of the country on the fringes of the Sahel. The NMCP is still faced with limited capacity — for example in personnel and logistics — for implementing planned activities and for assisting state and local officials. A further challenge is promoting the collection and use of high-quality data and to promote evidence-based decision-making. Often cumbersome bureaucratic processes hamper the programme's efforts for improving collaboration.

Nigeria reported US\$ 3.5 million in government funding for malaria control in 2003, with an additional US\$ 2.3 million from other sources. The GFATM will contribute a further US\$ 40 million under two grants.

National malaria policy and strategy environment

National malaria strategy overview for 2003

| | Strategy |
|---|----------|
| Treatment and Diagnosis Guidelines | Yes |
| Published/updated in | 2001 |
| Monitoring antimalarial drug resistance | Yes |
| Number of sites currently active | 6 |
| Home management of malaria | Yes |
| Vector control using insecticides | No |
| Monitoring insecticide resistance | Yes |
| Number of sites currently active | 1 |
| Insecticide-treated mosquito nets (ITNs) | Yes |
| Intermittent preventive treatment (IPT) | Yes |
| Epidemic preparedness | No |

Current antimalarial drug policy

| | Current policy |
|--------------------------------------|-----------------------|
| Uncomplicated malaria | |
| <i>P. falciparum</i> (unconfirmed) | ATM-LUM* |
| <i>P. falciparum</i> (lab confirmed) | ATM-LUM* |
| <i>P. vivax</i> | NA |
| Treatment failure | Q(7d) |
| Severe malaria | Q(7d) |
| Pregnancy | |
| Prevention | SP (IPT) |
| Treatment | ACT (2nd & 3rd trim.) |

EPIDEMIOLOGICAL DATA

Following WHO recommendations, malaria case reporting is carried out in most countries. The data presented below reflect aggregated malaria cases at the national level and are presented by gender, age and subnational level as submitted to WHO. Malaria reporting from national surveillance systems varies in quality and reporting completeness and may have limited value in understanding the actual malaria burden, but may be useful for understanding trends in the relative burden of malaria in the public health sector.

Reported malaria cases (annual)

| 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|-----------|-----------|-----------|-----------|---------------------------------------|-----------|-----------|-----------|-----------|-----------|
| 1 116 992 | 909 656 | 1 219 348 | 981 943 | 1 175 004 | 1 133 926 | 1 149 435 | 1 148 542 | 2 122 663 | 1 965 486 |
| 2000 | 2001 | 2002 | 2003 | Date of last report: 10 November 2004 | | | | | |
| 2 476 608 | 2 253 519 | 2 605 381 | 2 608 479 | | | | | | |

Reported malaria by type and quality

For most recent year

| | |
|-------------------------|-----------|
| Reported malaria cases | 2 608 479 |
| Reported malaria deaths | 5 343 |

Probable or clinically diagnosed

| | |
|--|-----------|
| Malaria cases | 2 608 479 |
| Severe (inpatient or hospitalized) cases | |
| Malaria deaths | 5 343 |

Slides taken

Rapid diagnostic tests (RDTs) taken

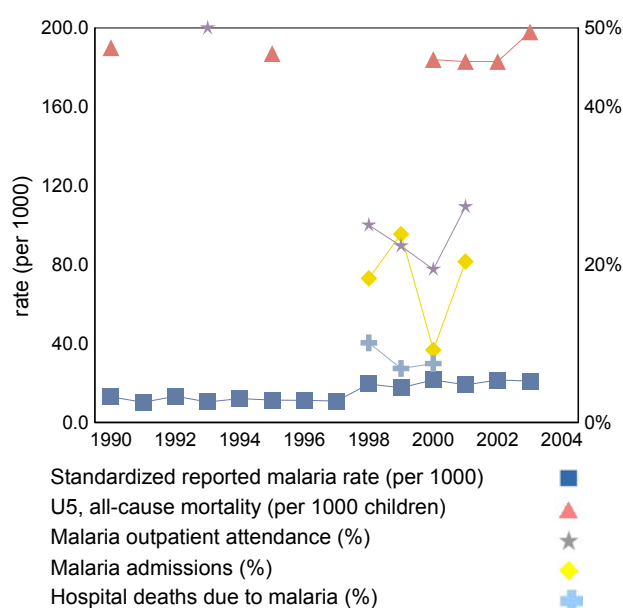
Laboratory confirmed

| | |
|--|--|
| Malaria cases | |
| <i>P. falciparum</i> or mixed | |
| <i>P. vivax</i> | |
| Severe (inpatient or hospitalized) cases | |
| Malaria deaths | |

Investigations

Imported cases

Estimated reporting completeness (%) 73



Reported malaria cases by age and gender

| Group | Subgroup | 2000 | 2001 | 2002 | 2003 | % |
|-------|----------|-----------|-----------|-----------|-----------|-----|
| | Total | 2 476 608 | 2 253 519 | 2 605 381 | 2 608 479 | 100 |
| | PW | 956 | | | | 0 |
| Age | <5 years | 1 128 435 | 996 938 | 1 118 598 | | 43 |
| | 5> years | 1 348 178 | 1 256 580 | 1 486 783 | | 57 |

Reported malaria cases by selected subnational area

| | 2000 | 2001 | 2002 | 2003 | % |
|--|------|------|------|------|---|
|--|------|------|------|------|---|

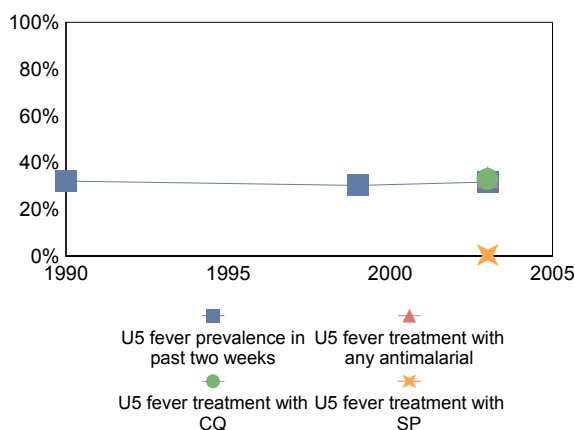
COVERAGE OF ROLL BACK MALARIA INTERVENTIONS

Information related to the coverage of RBM key interventions is presented here. This includes coverage of antimalarial treatment, possession and use of insecticide-treated nets (ITNs), and use of intermittent preventive treatment (IPT) among pregnant women (PW) where national policy indicates.

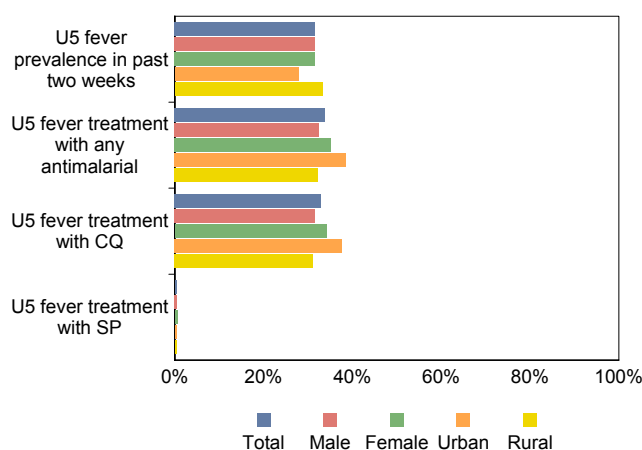
Fever prevalence and treatment with antimalarials

Prompt access to effective treatment is one of the key interventions promoted by RBM. Information presented below is from household surveys on fever prevalence and reported treatment of fever with antimalarials among children under 5 years of age (U5) within the previous 2 weeks.

Trend in fever prevalence and antimalarial coverage estimates from national surveys



Estimate of fever prevalence and treatment with antimalarials from most recent national survey



Available national surveys

DHS 2003

Sample size (U5s): 5 345
Field work: Mar-Aug 2003
Scale: national

Supporting organization: National Population Commission, Macro DHS

DHS 1999

Sample size (U5s): 3 206
Field work: Mar-May 1999
Scale: national

Supporting organization: National Population Commission, Macro DHS

DHS 1990

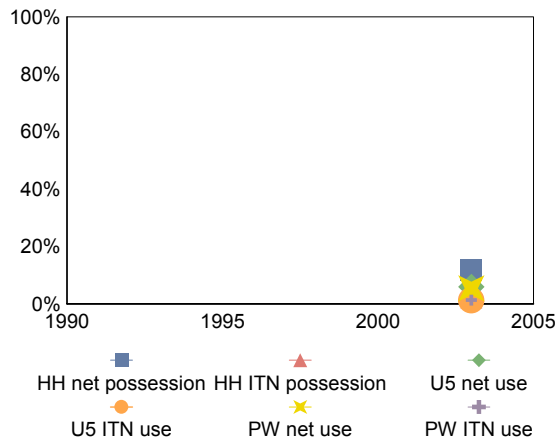
Sample size (U5s): 7 107
Field work: Apr-Oct 1990
Scale: national

Supporting organization: National Population Commission, Macro DHS

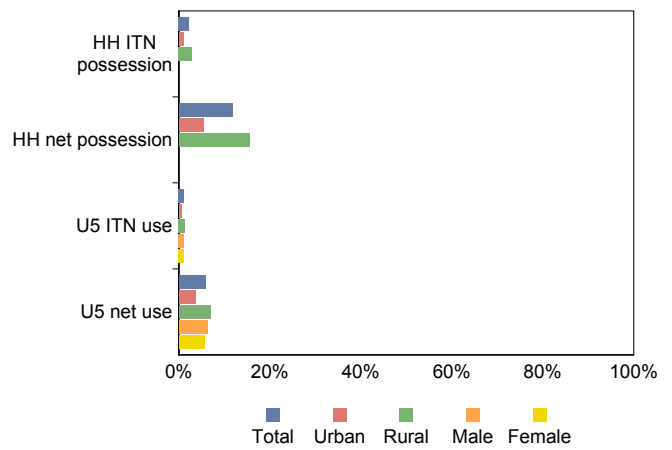
Insecticide-treated nets

ITNs are one of the key interventions promoted by RBM. Coverage of ITNs is best assessed through household (HH) surveys which ask questions on possession and use of nets, as well as insecticide treatment status, among the target populations of children under 5 years of age (U5) and pregnant women. Data below represent available household survey results in which household possession and use of nets and ITNs have been assessed.

Trend in mosquito net coverage estimates from national surveys



Estimates of ITN coverage from most recent national survey



Available national surveys

DHS 2003

Sample size (HHs or U5s): 7 225
Field work: Mar-Aug 2003
Scale: national

Supporting Organization: National Population Commission, Macro DHS

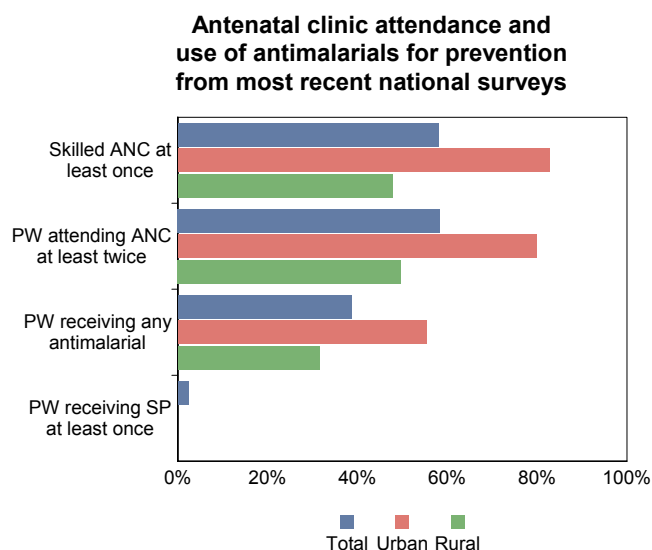
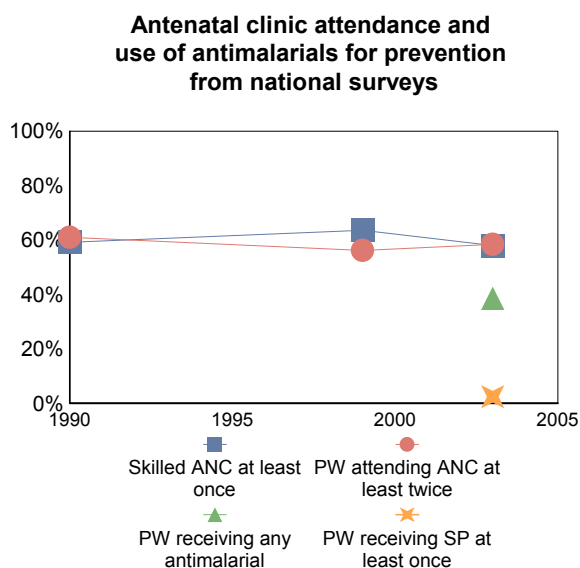
Available sub-national surveys

NetMark 2000

Sample size (HHs or U5s): 1 402
Field work: Oct 2000
Scale: 5 areas: Lagos, Ibadan, Nsukka, Maiduguri, Kano

Intermittent preventive treatment during pregnancy

RBM promotes IPT with SP in countries with areas of stable malaria transmission as one of its key prevention strategies for pregnant women (PW). However, few surveys have assessed the coverage of IPT among pregnant women. Data below represent available household survey results in which indicators related to monitoring IPT have been assessed. The level of skilled antenatal attendance and the percentage of women attending antenatal clinics (ANC) at least twice are presented as a background for which improvements in IPT can be achieved.



Available national surveys

DHS 2003

Sample size (PW): 3 911
Field work: Mar-Aug 2003
Scale: national

Supporting organization: National Population Commission, Macro DHS

DHS 1999

Sample size (PW): 3 547
Field work: Mar-May 1999
Scale: national

Supporting organization: National Population Commission, Macro DHS

DHS 1990

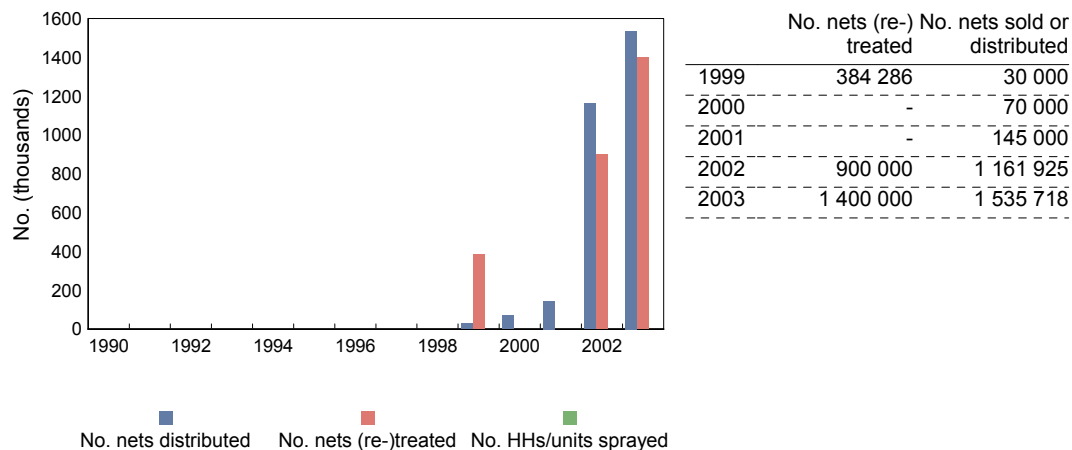
Sample size (PW): 4 881
Field work: Apr-Oct 1990
Scale: national

Supporting organization: National Population Commission, Macro DHS

SERVICE DELIVERY AND MALARIA-RELATED COMMODITIES

General malaria-related services delivered

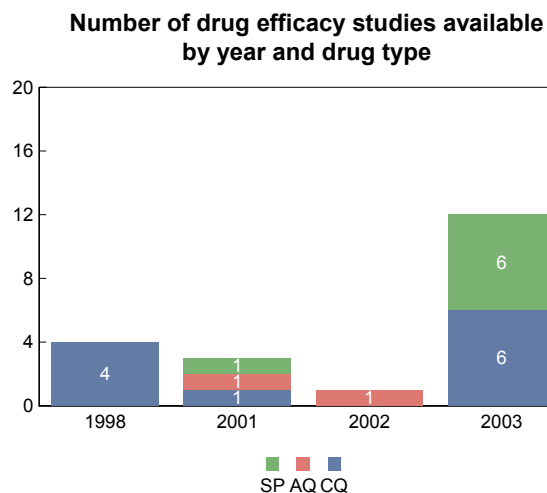
Services delivered for malaria control include numbers of nets and insecticides delivered or sold, numbers of nets (re-)treated with insecticide and numbers of households (HHs)/units sprayed during IRS campaigns. These services and service-related commodities mostly reflect core malaria control activities of national malaria control programmes. The information reflects annual, country-reported data.



MONITORING ANTIMALARIAL DRUG EFFICACY

Monitoring antimalarial drug efficacy is important for understanding the impact of antimalarial treatment being delivered and the need for drug policy change, essential for ensuring prompt access to effective treatment. Median, range and quartiles are based on percentage clinical failure for uncomplicated *P. falciparum* malaria for countries in Africa south of the Sahara, and percentage total failure for all other areas. Included are studies that used WHO protocol among selected drugs.

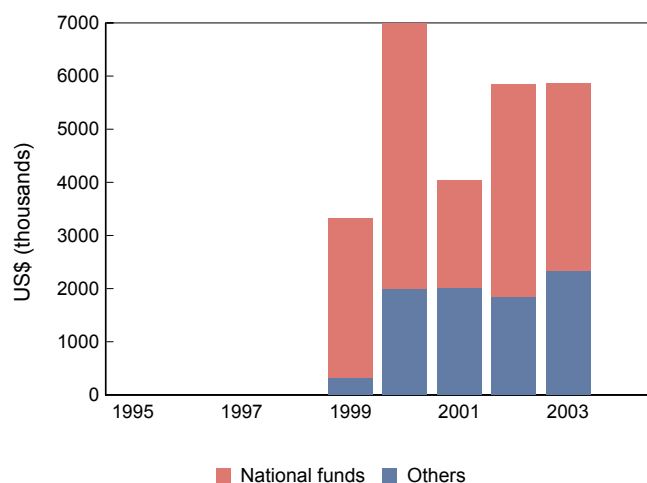
| Study years | Number of studies | Median | Range | | Percentile | |
|-------------|-------------------|--------|-------|------|------------|------|
| | | | Low | High | 25th | 75th |
| CQ | | | | | | |
| 1998-2003 | 11 | 25.8 | 2.0 | 53.7 | 13.6 | 38.7 |
| SP | | | | | | |
| 2001-2003 | 7 | 9.3 | 5.7 | 43.5 | 7.7 | 40.5 |
| AQ | | | | | | |
| 2001-2002 | 2 | 1.5 | 0.0 | 2.9 | 0.0 | 2.9 |



FINANCING FOR MALARIA

Annual funding for malaria control

This information represents country-reported national and other resources budgeted or spent for national malaria control programme efforts. If information was reported in a different currency than US\$, the annual average of the official exchange rate from the World Development Index was used for conversion. Currency is presented in US\$ (thousands).



| | National funds | Others |
|------|----------------|--------|
| 1995 | - | - |
| 1996 | - | - |
| 1997 | - | - |
| 1998 | - | - |
| 1999 | 3 000 | 320 |
| 2000 | 5 000 | 2 000 |
| 2001 | 2 020 | 2 020 |
| 2002 | 4 000 | 1 850 |
| 2003 | 3 530 | 2 330 |
| 2004 | - | - |

Malaria funds from the Global Fund to Fight HIV, Tuberculosis, and Malaria

Information on additional resources provided to countries through GFATM from 2-year committed funds for malaria from successful proposals through the first four rounds is presented. The details on approved proposals, grant agreements and disbursements to date are provided. Figures are presented in US\$. These data are maintained and updated by GFATM.

| Approved proposals | | | Grant agreements and disbursements (as of 13 January 2005) | | | | | | | |
|--------------------|-------|------------------------|--|--------|----------------|--------------|----------------------|-----------------|-------------|--|
| Source | Round | Total year 1-2 budgets | Principal recipient | Signed | Signature date | Grant amount | No. of disbursements | Total disbursed | % disbursed | |
| CCM | 2 | 20 994 149 | Yakubu Gowon Center | Yes | 22-Oct-04 | 20 994 149 | 1 | 4 582 319 | 21.8% | |
| CCM | 4 | 20 467 000 | Yakubu Gowon Center | Yes | 03-Dec-04 | 20 467 000 | 1 | 4 268 800 | 20.9% | |

General notes and remarks

See explanatory notes at the beginning of the section.

* policy adopted, not presently being deployed, implementation process ongoing