**Children under five years of age with fever who received treatment with any antimalarial (percentage)**

**Rationale for use**

Prompt treatment with effective anti-malaria drugs for children with fever in malaria risk areas is a key intervention to reduce mortality. In addition to be listed as a global MDG indicators under Goal 6, malaria effective treatment is also identified by WHO, UNICEF, and the World Bank as one of the four main interventions to reduce the burden of malaria in Africa: (i) use of insecticide-treated nets (ITNs), (ii) prompt access to effective treatments in or near the home, (iii) providing antimalarial drugs to symptom-free pregnant women in stable transmission areas, and (iv) improved forecasting, prevention and response, essential to respond quickly and effectively to malaria epidemics.

In areas of sub-Saharan Africa with stable levels of malaria transmission, it is essential that access to prompt treatment is ensured. This requires drug availability at household or community level and, for complicated cases, availability of transport to the nearest equipped facility. Reserve drug stocks, transport, and hospital capacity are needed to mount an appropriate response to malaria cases and prevent the onset of malaria to degenerate to a highly lethal complicated malaria picture.

**Definition**

Percentage of population under five years of age in malaria-risk areas with fever being treated with effective antimalarial drugs:

- **Numerator (N):** number of children under five years of age in malaria-risk areas with fever being treated with effective antimalarial drugs
- **Denominator (D):** number of children under five years of age in malaria-risk areas

**Associated terms**

**Malaria-risk areas** include areas of stable malaria transmission (allowing the development of some level of immunity) and areas of unstable malaria transmission (seasonal and less predictable transmission impeding the development of effective immunity).

**Data sources**

Household surveys such as Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), Malaria Indicator Surveys (MIS), and ‘rider’ questions on other representative population-based surveys, that include questions on whether children under five years of age slept under an ITN the previous night.
Effective antimalarial drugs 1: Consistent with WHO recommendations, malaria endemic countries which are experiencing high levels of resistance to currently-used antimalarial drugs such as chloroquine and sulfadoxine/pyrimethamine (SP) are changing treatment policies from monotherapies to combined therapies including available drugs (SP and amidioquine). The purpose of combined drugs is to produce a mechanism of action at different stages of the parasitic cycle. Artemisinin-based combination treatments (ACTs)2 are considered the most effective combinations. However they cannot be broadly recommended as artemisinin drugs are not necessarily available due to production limitation. ACTs combine an artemisinin compound with a partner antimalarial drug to which there is little or no resistance in the country or situation in which the ACT is to be deployed. The advantages of ACTs relate to the properties of artemisinin compounds, which include rapid reduction of the parasite biomass with fast resolution of clinical symptoms, effectiveness against multi-drug resistant falciparum malaria, resistance not being documented yet, and a good safety profile.

Data sources

Demographic and Health Survey (DHS), (DHS, www.measuredhs.com) for both indicators.

Multiple Indicator Cluster Survey (MICS), (MICS, www.childinfo.org) for both indicators.

Malaria stand-alone surveys (community component) for ITNs and access to treatment as well.

Methods of estimation

For prevention, the indicator is calculated as the percentage of children under five years of age who received effective anti-malaria drugs upon a fever episode. The information is obtained directly from household surveys. The empiric values are directly reported without further estimation.

Disaggregation

By age, sex, location (urban/rural, major regions/provinces), and socio-economic characteristics (e.g. education level, wealth quintile)

References

- WHO/Roll Back Malaria site. (http://www.rbm.who.int)


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1 An update on Quality Assurance and Procurement through WHO for Improving Access to Artemisinin-based Combination Treatments (ACTs) for Malaria. Malaria Control Department. WHO, 2003.

Database


Comments

The accuracy of reporting in household surveys may vary.