Seasonal Malaria Chemoprevention: WHO Policy Recommendation and its implications for case management

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Key antimalarial interventions & strategies

Prevention

- Insecticide-treated mosquito nets (LLINs)
- Indoor Residual Spraying
  
In areas of high and stable transmission
- IPT in pregnancy (IPTp)
- IPT in infancy (IPTi)

In areas of high seasonal transmission
- Seasonal Malaria Chemoprevention

Diagnosis & Treatment

- Parasite based diagnosis
  - Microscopy
  - Rapid Diagnostic Tests
- Artemisinin-based combination therapies (ACTs)

Case management service delivery areas:
  - Health facilities
  - Community Case Management
  - Private sector

Surveillance, M & E

- Routine HMIS
- Malaria surveillance and response systems
- Household surveys

Strengthening health systems in endemic countries
Seasonal Malaria Chemoprevention (SMC) / Chimio-prévention Saisonnière du Paludisme (CSP): Policy Recommendation

- SMC is defined as the intermittent administration of full treatment courses of an antimalarial medicine during the malaria season to prevent malaria illness with the objective of maintaining therapeutic antimalarial drug concentrations in the blood throughout the period of greatest malaria risk.
  - A complete treatment course of amodiaquine plus sulfadoxine-pyrimethamine (AQ+SP) should be given to children aged between 3 and 59 months at monthly intervals, beginning at the start of the transmission season, to a maximum of four doses during the malaria transmission season (provided both drugs retain sufficient antimalarial efficacy).
Seasonal Malaria Chemoprevention (SMC) / Chimio-prévention Saisonnière du Paludisme (CSP): Policy Recommendation

● Target areas for implementation is the Sahel sub-region where:
  ▪ malaria transmission is highly seasonal and the majority of clinical malaria cases occur during a short period of about four months,
  ▪ the clinical attack rate of malaria is greater than 0.1 attack per transmission season in the target age group, and
  ▪ AQ+SP remains efficacious (>90% efficacy).

● SMC Contraindications: SMC should not be given to -
  ▪ a child with severe acute illness or unable to take oral medication,
  ▪ an HIV-positive child receiving co-trimoxazole,
  ▪ a child who has received a dose of either AQ or SP drug during the past month,
  ▪ a child who is allergic to either drug (AQ or SP).
Evidence (Expected benefits)*

- Prevents approximately 75% of all malaria episodes
- Prevents approximately 75% of severe malaria episodes
- May result in a decrease in child mortality (1 fewer per 1000)
- Probably reduces the incidence of moderately severe anaemia (19 fewer per 1000)
- Does not result in an increase in clinical malaria in the following malaria transmission season after one year of administration
- Serious adverse events have not been reported and are probably rare

*Based on results from 7 studies on SMC conducted in areas of highly seasonal transmission of malaria using AQ+SP monthly for up to 4 months during the transmission season in children less than 5 years of age
Policy and Implementation status

- WHO Policy formulation – (March 2012)
  - TEG recommendation – May 2011
  - MPAC endorsement – Feb 2012

- Publication of the field guide to support National adoption and implementation of SMC (Nov 2012)

- Next step
  - support to facilitate national adoption and implementation by NMCP.
Implementation of SMC: Inter-country orientation meeting (Dec 2012)

- Burkina Faso
- The Gambia
- Chad
- Ghana
- Guinea
- Guinea Bissau
- Mali
- Niger
- Nigeria
- Senegal
SMC – Implications for Case Management

- Antimalarial treatment policies
  - The choice of SP+AQ (a non-artemisinin based combination) for SMC allows that artemisinin combinations being reserved for treating clinical cases where the rapid action of artemisinins as a combination partner is most useful.
  - Treatment of breakthrough malaria infections during the period of SMC should not include either AQ or SP or combination drugs containing either of these medicines, such as AS+AQ.
    - In areas where SMC is implemented, alternative antimalarial combinations containing neither AQ nor SP must be made available for the treatment of clinical malaria in the target age group.

- Deployment strategies
  - While there are several potential approaches to implementing SMC, however, if possible, its delivery should be integrated into existing programmes, such as Community Case Management and other Community Health Workers schemes.
In areas where SMC is deployed:

- Drug resistance monitoring and system evaluation should be supported or instituted,
  - Deployment of SP+AQ may increase drug pressure on the malaria parasite and lead to increased parasite resistance to SP and AQ
    - Potential implications for ACTs containing AQ or SP
- The health system needs to record and monitor AQ+SP doses administered in order to evaluate the impact of the intervention. Existing systems to document severe malaria, malaria deaths, and record confirmed cases of malaria should be strengthened.
- Pharmacovigilance should be strengthened where it exists, and where it does not, it should be instituted.
Thank you