NATIONAL MALARIA ELIMINATION CENTRE
Severe Malaria Management in Zambia
Introduction

• Malaria is still a disease of major public health concern- > 7M cases and >1,200 deaths annually.

• Transmission is heterogeneous, all year round with peaks associated with the rainy season

• The goal of the NMESP 2022-2026 is to achieve burden reduction in high transmission areas and subnational elimination in low transmission areas

• Key interventions – Vector Control (LLINs,IRS) , Case management (HF/Community), SBC and SMEOR
Current Malaria situation – Deaths

Total Malaria Deaths
National Level | January - June | HMIS

Total Malaria Deaths
Provincial Level | January - June | HMIS

No Change
Increase
Decrease
No Deaths Recorded
Total U5 Malaria Cases
National | January - June | HMIS

- 2021 Total U5 Malaria Cases
- 2022 Total U5 Malaria Cases
- 2023 Total U5 Malaria Cases

Current Malaria situation – U5 cases (Jan-April)
Current malaria situation – IPD cases

*The IPD cases are used as a proxy of severe malaria cases.
Current malaria situation – IPD cases

Total Malaria IPD Cases
Provincial Level | January - June | HMIS

Luapula Province: 5,585 (2021), 4,228 (2022), 1,183 (2023)
North Western Province: 4,674 (2021), 3,418 (2022), 1,106 (2023)
Copperbelt Province: 8,220 (2021), 7,004 (2022), 10,514 (2023)
Eastern Province: 11,036 (2021), 9,386 (2022), 8,664 (2023)
Northern Province: 5,456 (2021), 4,497 (2022), 5,507 (2023)
Muchinga Province: 7,104 (2021), 6,007 (2022), 6,978 (2023)
Central Province: 2,124 (2021), 2,212 (2022), 2,311 (2023)
Western Province: 2,273 (2021), 3,099 (2022), 2,895 (2023)
Lusaka Province: 3,228 (2021), 2,225 (2022), 1,221 (2023)
Southern Province: 1,351 (2021), 1,131 (2022), 1,08 (2023)

2021 Total Malaria IPD Cases (HMIS) 2022 Total Malaria IPD Cases (HMIS) 2023 Total Malaria IPD Cases (HMIS)
Management of severe malaria

- Severe malaria is a medical emergency

- All levels of care including the community and health facilities have a big role to play in the treatment of malaria

- All cases of severe malaria (including infants, pregnant women in all trimesters and lactating women) are treated with intravenous or intramuscular artesunate for at least 24 hrs and until they can tolerate oral medication after which they complete a 3 day course of an ACT (AL)
Management of severe malaria

• Facilities with no inpatient facilities will give artesunate (intramuscularly or intravenously) prior to referral to the next level of care.
  – < 20 kg => 3 mg/kg bw
  – >20kg => 2.4 mg/kg bw

• Rectal artesunate is used as pre-referral treatment for suspected /confirmed severe malaria for children 2 months old to less than 6 years at community level (10mg/kg bw). This is followed by full course of injectable artesunate and Artemether-lumefantrine at the Health facility.

• Parenteral Quinine is the alternative treatment if injectable artesunate is contraindicated or not available
Concept of iCCM to improve access
Effect of Community Health Workers in the Malaria Case Management

- Health Management Information System (HMIS) and Malaria Rapid Response (MRR) - Significant increase in malaria cases treated by CHWs from 2019 (11%) to 2023 (23%)
Provincial Performance in Community Case Management by CHWs
Example of Enhancing the Community Referral System – Case Study (Green et al. 2023, Bull World Health Organ 2023;101:371–380A)

- HMIS, reported deaths from severe malaria reduced significantly from 3.1% (22/699) to 0.5% (2/365) in two demonstration districts – Serenje and Chitambo.
- And from 6.2% (14/225) to 0.6% (2/321) in eight scale-up districts.
Total number of CHWs in Zambia as of July, 2023 is 22,398
Best Practices

- Scaling of iCCM intervention to all 116 Districts in the country (1 CHW:500 Pop) – 40,000 CHWs target

- Saturation of CHWs to enhance case management and malaria surveillance.

- Consistent commodity supply to CHWs

- Proper Data management though the use of phones and soft wares

- Regular data quality audit and Data Review
Best Practices

• Regular Support supervision and mentorship at all levels (Central, District, Health Facility & Community).

• Periodical refresher trainings as a platform to orient and update on new things.

• Provision of enablers (Bicycles, Bags, CHW Kits, T-shirt, Aprons)

• Equipping of Motor bikes at facility level to facilitate out reach activities by Facility staff.

• Provision of monthly stipends and other incentives to CHWs – Being considered, discussions ongoing
Challenges

- Erratic supply of commodities to health facility and community level.
- Inadequate support supervision and mentorship at all levels
- Some CHWs not provided with enablers by collaborating partners
- No steady mechanism in place to sustain worn out enablers and phones
- Attrition of CHWs due to lack of motivation and poor selection criteria
- Inadequate finances to undertake the said above interventions and complete trainings to meet targets.
Conclusion

- Severe malaria is a medical emergency and requires prompt treatment

- Community Health Workers in Zambia play a critical role in the management of severe malaria and quality health care through the identification of the danger signs and prompt referral treatment using RAS and referral to the next level
Thank You For Your Attention