

### Strengthening Fever Case Management

Separating Myths From Facts

An interactive guide for engaging healthcare providers









This tool is used as a visual aid to accompany the provider dialogue framework implemented in the cluster meetings and facility mentorship discussions. It can be displayed as a slide deck or printed where access to electricity is an issue. In addition to displaying each slide showing myths and facts, facilitators should refer to the provider dialogue framework for additional supporting information to share with providers during these discussions This document is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of Breakthrough ACTION and do not necessarily reflect the views of USAID or the United States Government. Breakthrough ACTION is funded by the U.S. Agency for International Development (USAID) and the U.S. President's Malaria Initiative under the terms of Cooperative Agreement No. AID-OAA-A-17-00017

### **Separating Myths from Facts**





### Malaria is the commonest cause of illness in children under-5



#### Malaria is not the commonest cause of illness in Children under 5

#### **Commonest causes of illness in children U5**

Disease	
Pneumonia	18%
Malaria	14%
Preterm birth complications	12%
Intrapartum related events	11%
Diarrhoea	10%
Sepsis/meningitis	8%

• Nationally, malaria prevalence decreased to 23% in 2018 from 27% in 2015 and 47% in 2010 (*NDHS, expert microscopy*)





Microscopy is the confirmatory test for malaria when RDT result is negative in a fever patient.



#### Microscopy should not be used as a confirmatory test for malaria when RDT result is negative

- Malaria RDT is NOT a screening test, it is a confirmatory test too.
- Most microscopists have not been trained specifically in malaria microscopy (10 days intensive certificate training with WHO standard)
- Among those trained in malaria microscopy, the mean slide reading detection rate achieved was 40% (Olukosi et al, 2015)
- It is easy to confuse contaminants (artefacts) and other pathogens with malaria parasite, and this is what we find happening in our facilities.
- Quality assured Malaria RDT is as good as expert microscopy





mRDT is not reliable for diagnosis of malaria in Nigeria since it does not detect all species of malaria parasite.



# mRDT is reliable for malaria diagnosis in Nigeria



- Plasmodium falciparum is the most prevalent malaria parasite species in Nigeria (99.7%) and most RDTs in Nigeria are made to detect *pf*
- The other species are rare and even when present, rarely cause severe disease
- RDTs are the best technology possible for detecting malaria in Nigeria today considering the barriers to quality microscopy





mRDT can detect malaria parasites even at low parasite densities





## mRDT can detect malaria parasites even at low parasite densities



- WHO prequalified and recommended RDTs have a panel detection score (PDS) of ≥75% at 200 parasites/µl
- Most symptomatic malaria cases would have enough parasites to be detectable by RDT





Experienced clinicians can accurately confirm malaria based on their clinical judgment alone



# Experienced clinicians cannot confirm malaria based on their clinical judgment alone

- Only 12% of all health workers accurately diagnosed malaria with anaemia.
- Only 36% of medical doctors were able to give a correct diagnosis

(Source: Nigeria Health Facility Survey 2018)





Poor storage and high temperatures can cause mRDTs to give false negative results



#### Poor storage and high temperatures cannot cause mRDTs to give false negative results



- RDTs are manufactured to withstand the high temperatures of our climate
- RDTs are stable in moderate and extreme storage conditions.
- Compromised RDT kits will give invalid results and not false negative results.





### A rapid test for HIV is more accurate than an mRDT



Both tests are equally accurate.

- HIV test and mRDT both have a sensitivity of 99-100% sensitive.
- They use the same technology.





If a child got better after taking ACT when an mRDT result was negative, it means the test was inaccurate



# The test result was accurate, the child's fever was not due to malaria



- If a child got better after taking ACT when a test showed no malaria, it means that the child probably had a virus which would have gotten better on its own.
- Evidence from Sub-Saharan Africa indicates that most systemic infections and acute respiratory infections in children are due to viruses.

### Improving management of fever and malaria



Is it really malaria?

# Get in touch

For more information, please contact:

Dr Shittu Abdu-Aguye – Breakthrough ACTION-Nigeria Project Director shittu@ba-nigeria.org