Management of possible serious bacterial infection (PSBI) where referral is not possible

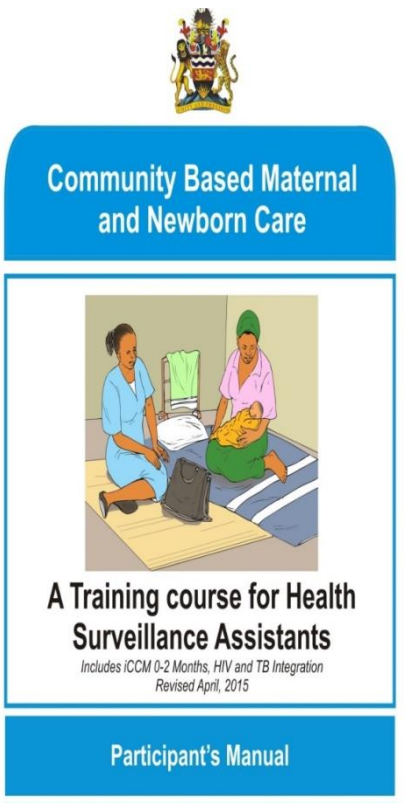
Dissemination of results for Ntcheu district

11th June 2018

IMCI unit, MOH

Background & Objectives

- MOH adapted the WHO “Caring for newborn at home” guidelines for Malawi
- Introduced in Ntcheu through RAcE iCCM programme
- Treatment of young infants with danger signs remained problematic (distance to hospital, transport & other costs, household workload, overcrowded hospitals etc.)
- WHO guidelines on management of PSBI when referral not possible is a great opportunity to address the referral issue



Background & Objectives (2)

- MOH conducted implementation research before introducing the WHO PSBI guidelines

- The research was supported by WHO RAcE programme

Primary objective:

To evaluate feasibility and acceptability of treatment of PSBI for young infants at first-level care facilities

Study partners:

- IMCI Unit in the Ministry of Health
- Ntcheu District Health Office
- Save the Children
- World Health Organization

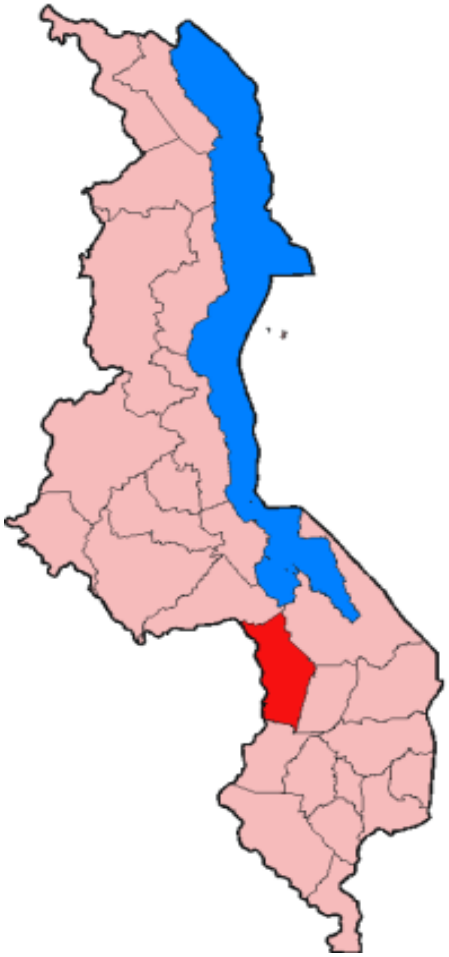
Study Site Description

Ntcheu district

Health services: District Hospital (referral); 39 first level facilities (28 with maternity); Community village clinics

Study site characteristics

- 12 health centers & their HSAs (~148)
- Catchment population ~260,666
- Expected live births* = **9,671/year**
- Expected PSBI cases (10%) = 967/year
- High levels of ANC and facility delivery



Ntcheu district,

**based on CBR of 37.1/1000 population in 2015; https://knoema.com/atlas/Malawi/Birth-rate*

Rationale (2)

RAcE CBMNC household survey (2016) in Ntcheu district found:

- HSA visited ~1 in 5 mothers and newborns at home within the first 8 days and <1 in 10 within 3 days of delivery
- 94% of mothers able to mention 2+ newborn danger signs.
- **92%** of babies with reported danger signs were taken for treatment directly to a public health facility or hospital

Health workers and their responsibilities

Clinicians/Nurses:

- Establish eligibility and counsel families on referral, and ensure understanding that hospitalization is the preferred option
- Administer 1st dose of Gentamicin & oral amoxicillin on enrolment day & repeat the dose on following day
- Conduct mandatory follow-up assessment on day 4 and outcome assessment on day 8

Community Health workers and their responsibilities

HSAs

- Conduct pregnancy & PNC home visits to counsel families on newborn danger signs/PSBI and care-seeking at health facility
- Conduct home visits/contact family on **Day 3** and **Day 6** for infants on PSBI treatment

Secret mothers (volunteers):

- Identify & register pregnant women and women who have just delivered
- Link community members with HSAs

Preparation for the study

- Preparations started in September 2015
- MOH led dialogue at national and district levels
- Research protocol developed & submitted to National Health Sciences Research Committee
- Engagement with traditional authorities & community members
- Adaptation of protocol, training materials and data collection tools led by MOH

- Identification of study sites, staff & capacity strengthening (TOT, HF staff, HSAs and secret mothers)

Policy Dialogue

Policy questions	Decisions made by MOH
Who will identify sick young infants in the community?	Families (mostly self-referrals as high facility delivery rates, knowledge of danger signs, and care-seeking); HSAs also trained to identify and refer
Where will sick young infants be assessed?	First level health facility
Who will assess and confirm classification?	Health facility staff (clinical officers, nurses)
Who will provide treatment if referral to hospital is not accepted by the family?	Health facility staff
Where will this treatment be provided?	At the enrolling health facility
If referral to hospital is refused, what treatment regimen for clinical severe infection?	2 injections of gentamicin and oral amoxicillin for 7 days
If referral is refused, what treatment regimen for fast breathing only?	Oral amoxicillin for 7 days for 0-6 days old
Where should the demonstration sites be?	12 facilities in Ntcheu district

Major challenges faced and solutions identified

Challenges faced	Solutions found
Poor referral systems (specifically lack of ambulances for transport)	DHO to provide fuel/support for referral transport Referral notification and feedback to health facilities
Lack of time/inadequate human resources	DHO deployed more technical staff to health facilities
Communication issues (network, airtime) with HSAs	Continuous and consistent supervision of HF staff & HSAs
Distance for HSAs/large catchment areas; residency	Enhance support to and motivate HSAs (solar power, bicycles, etc)
Challenges locating families/families residing outside CA (e.g Moz)	Focus on ensuring mandatory facility follow-up completed at first level facility

Lessons learned

- Caregivers of sick young infants are able to recognize illness, voluntarily seek care at HF and adhere to follow-up and treatment
- Health facility staff have capability to assess, classify and treat PSBI cases at their level.
- Study training sessions that combined HSAs and health facility nurses and clinicians improved working relationship and performance.
- Identification of cases among infants 0-6 days was improved after review meetings identified need to make daily and pre-discharge assessment of newborns.
- HSAs were able to follow-up more than half of sick young infants under treatment. Secret mothers have potential to improve community linkages for HSAs by identifying pregnancies, mothers with newborns and link them to the HSA

Key messages

- For policy makers
  - Update PSBI case management policy (update IMCI protocol)
  - Develop detailed plan for expansion to other districts, including approach for rigorous M&E
- For programme implementers
  - Develop SOPs for secret mothers and other community groups for better engagement and community sensitization to increase uptake
  - Continuous capacity building sessions, including through review meetings, for HSAs and facility health workers will help ensure adherence in routine practice.
  - Post natal visits for newborn needs to be institutionalized into routine practice to improve case identification beyond those identified in outpatient department.

Key messages

- For partners and donors
  - Provide support for and allow sufficient time for dissemination and sharing of research results
  - Support MOH to scale up simplified treatment of PSBI nationally

Partners/Partnerships

- Unicef - 9 DISTRICTS
- USAID Onse project – 11 districts
- Save – UNDER DISCUSSIONS
- WHO – Awaiting Funding

Malawi PSBI Work Plan

Activity Name	Timing	Status
Engaging IMCI partners for possible funding	February '18	Done with UNICEF, MSH-ONSE, WHO and Save the Children
Approval of funding from partners	February '18	MSH-ONSE and UNICEF
Adaptation (Pretesting and Finalization) as well as incorporation into ICATT – Master/regional trainers available	5th – 11 h March '18	Done supported by MSH-ONSE And Unicef/WHO
Printing of Materials	12th – 16th March '18	Done supported by MSH-ONSE
Training of Trainers (ToT)	26th – 30th March '18 and 2nd – 6th April '18	Done supported by MSH-ONSE
District PSBI Training	April and May '18	MSH-ONSE supported -2 districts
District PSBI Training	11th – 29th June '18	UNICEF has funded 9 districts