

Improving case management of malaria during pregnancy by antenatal care providers in Akwa Ibom State, Nigeria

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Malaria in Pregnancy

- In Nigeria malaria causes approximately 11% of maternal deaths
- Malaria in pregnancy (MIP) is responsible for 63% of hospital admissions and
- 70% of illness among pregnant women.

To address MIP WHO recommends

1. Use of Insecticide treated bednets throughout pregnancy
2. Intermittent preventive treatment at each ANC visit after quickening
3. Prompt and appropriate case management



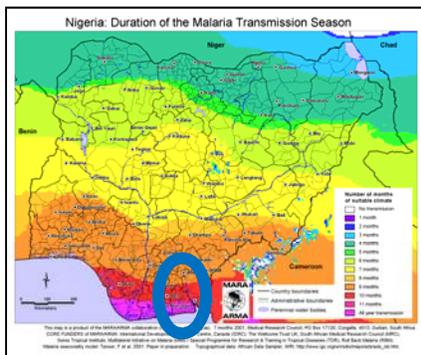
Since Case Management has been neglected we propose the following Learning Objectives

- Differentiate between clinical and parasitological diagnosis of malaria in

pregnancy

- Describe the process of training antenatal care workers on use of malaria rapid diagnostic tests (RDTs)
- Explain the effect of RDT use on malaria case management in pregnancy

Year-Round Malaria Transmission Season in Akwa Ibom State



Need for Proper Diagnosis before Treatment

- Unfortunately since malaria is often being treated presumptively, pregnant women still die from other fever-related illnesses
- Use of rapid diagnostic tests (RDTs) to confirm malaria before treatment provides an opportunity for earlier recognition of febrile illnesses not due malaria
- This study assesses the pattern of malaria diagnosis and treatment in pregnant women attending Antenatal care (ANC) in Akwa Ibom State, Nigeria.

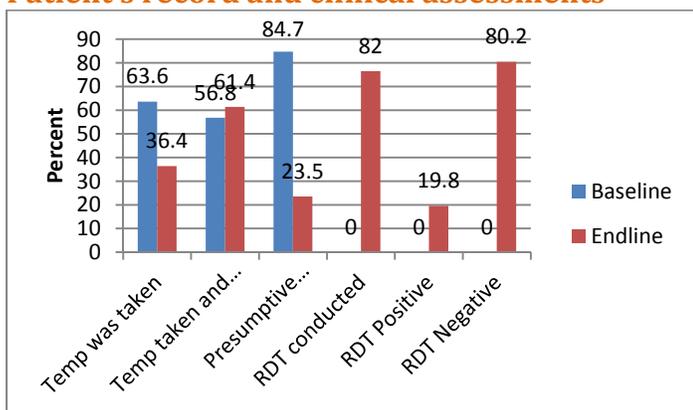
Appropriate Case Management of Malaria in Pregnancy

- Conduct test to confirm malaria prior to treatment
- Ensure that only those with RDT-positive results receive Quinine in the first trimester and artemisinin-based combination therapy (ACT), Subsequently
- Ensure that approved medicine is started within 24 hours of diagnosis and completed

Methods

- Review of record cards of pregnant women attending 6 government ANC clinics as baseline
- The patients' cards were drawn from ANC clinics with first non-follow-up visit for febrile illness the year before training (February 2010)
- Staff training on malaria diagnosis using RDTs and appropriate case management as intervention.
- Follow-up card review and after training (March 2011) by three nurses/midwives
- At baseline 597 cards were reviewed, and 472 at endline at 6 government owned ANC clinics in Onna and Ibeno Local Government Areas
- The ANC client cards were drawn from first non-follow-up visits where a complaint of 'fever' was recorded
- The State Ministry of Health approved the study and no client identifiers were collected

Patient's record and clinical assessments



Record Quality Issues

- Temperature was taken and recorded improved from 56.7% at baseline to 61.4%
- Difference between the two was statistically significant (p value = 0.00)



Pattern of Prescription for Anti-malarial Medicines

Anti-malarial medicines	Baseline	Endline	
Drug base		RDT+	RDT-
ACTs	80 (30)	29 (100)	6 (5.1)
Sulphadoxine-pyrimethamine	69 (26)	-	-
Quinine	61 (23)	-	-
Chloroquine	29 (11)	-	-
Quinine Injection	27 (10)	-	-
Total (N)	266	29	117

Pattern of prescription for Antibiotics

Name of Antibiotic	Base	Endline	
		RDT+ as %	RDT- as %
Septtrin	11	25	5
Chloamphenicol	0.5		
Ampiclox	21		2
Amoxicillin	37	32	62
Ampicillin	8	30.5	22
Gentamycin	1	12.5	5
Ciprofloxacin	7		
Amoxil Caps	1		
Flagyl	2		2
Tetracycline	0.5		1
Gentamycin Inj	1		1
Total N	198	8	117

Implications for Further Intervention

- Training encouraged adherence to rational prescribing of antimalarials and made possible better management of other fever-related illness during pregnancy
- Nursing and midwifery staff at government clinics could in a relatively short time period adopt RDTs
- Training helped them improve their prescribing of appropriate anti-malarial medicines
- Gaps exist in history taking, and malaria diagnosis and treatments with anti-malarials and antibiotics can be improved

Follow-up Recommended

- Continued follow-up and supervision will be needed to ensure that correct malaria diagnostic and treatment guidelines are fully practiced.
- Support is now needed to scale-up RDTs use in ANC clinics in Nigeria



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<http://www.jhpiego.org/en/content/malaria-prevention-and-treatment>