NVBDCP TECHNICAL REPORT OF GARIYABAND DISTRICT OF CHHATTISGARH STATE AND SPECIAL EMPHASIS ON THE SENTINAL SITE AND SITUATION AFTER MALARIA OUT BREAK

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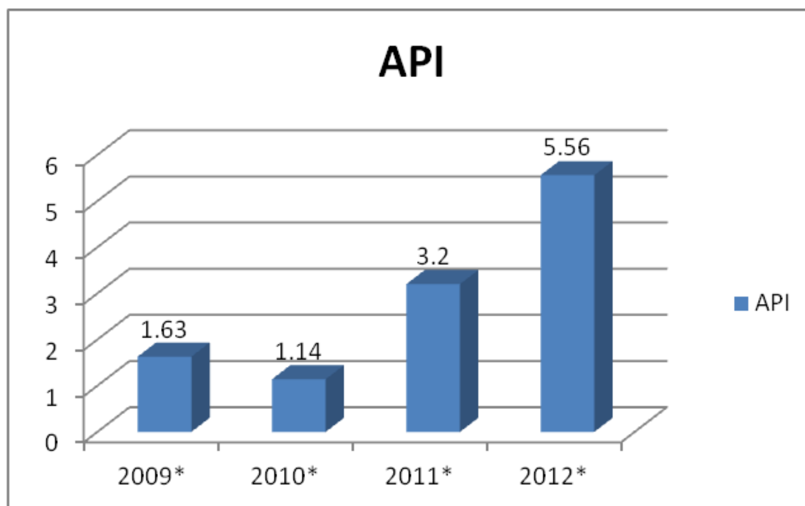
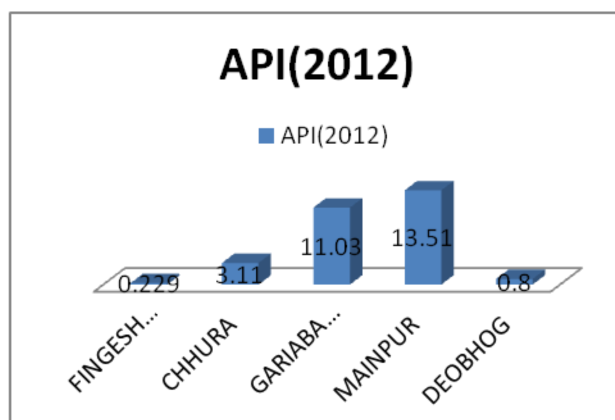
ABOUT DISTRICT: *Gariaband district of Chhattisgarh was formed on 1st January 2012 carved out of Raipur district. The district headquarters is Gariaband city. The district having 6 block CHC, 16 PHCs and 194 health sub centers. 55% of the land area occupied by forest.*

Sampling : *The team has visited 1 sentinel site of the district, 2 CHC , 2 PHC and 194 HSCs. The CMO, In charge DMO, BMO.RMA, DPM, MTS, LT and ASHA were interacted as and when required.*

Epidemiological aspects of Malaria in district: *The API almost doubled in the year 2012 as compared to the year 2011.* ***The SFR was 3.8 and SPR 3.94 in the year 2012. The Pf proportion is more than 95%. No malaria mortality since year 2008.***



The block wise API of the district in the year 2012 was ranging from 0.2 to 14.



Sentinel site (Observation based on January-December 2012)-District Hospital, Gariaband

A total 21795 patients attended at outdoor department, of which 4142 were suspected as malaria cases. A total 279 were diagnosed as confirmed malaria. The Majority of the cases were pf cases. 2684 were admitted in the ward and 70 were severe malaria cases(67 were severe cases of pf malaria). ***No death reported due to malaria at sentinel site of report 2012****.*

The team has reviewed the indoor case papers & has come across 3 deaths due to ***malaria positive*** *as per the case sheet at sentinel site.*

There is lack of human resource at the sentinel site hospital; MTS and one lab technician (RNTCP) have prepared the report. The blood transfusion facility and other ICCU with specialist are lacking at the district hospital.

The indoor case sheet and death registers are not maintained properly at surveyed District Hospital and CHC.

The no of deaths in the District Hospital where they are positive for malaria

Sr No	Name of patient	Age	Sex	village	RDK	DOA	IPD no
1	Fagunebai	35	F	Suhagpur	Pf RDK positive	15/12/2012	2882
2	Sheetgal Ramji	60	M	Pendra	PS for MP Falciparum	30/11/2012	2760
3	Maltibai	35	F	Jadeyadu	RDK positive	22/02/2013	

(IPD paper copy is attached as Annexure –I)

These patients were admitted in hospital in serious condition and deaths occurred few hours after admission. No epidemiological investigation of the suspected death cases were done at DMO office.

Malaria outbreak in district and lesion learnt:

11 villages from Manpur and 5 villages of Gariaband blocks are affected by fever outbreak during Oct-Nov2012. There is acute shortage of the MPW in the newly created district. ***Most of the affected villages are difficult to reach in the thick forest in Manpur block.and are not covered by Indoor Residual Spray in the year 2011 as the API was less than 2. However, the district authority took early and immediate action to control the epidemic.*** *Extra teams were deployed and camps were arranged in the affected area.* ***The stock of antimalarial drugs was adequately available at every Peripheral Health Institute.***

No proper epidemiological investigation of the outbreak was carried out by the District or state team. Only verbal investigation carried out (Annexure II). The entomological consultant should carry out entomological investigation during and after the outbreak to give input to the programme.

State should develop the entomological investigation team for outbreak investigation.

The ACT and other anti-malarial are available at each health facility after outbreak. The surveillance should be focused in unapproachable and difficult area and early warning system should be develop for early report of outbreak.

Malaria Microscopic:

Malaria microscopic centre facility available at block level only. No microscopic center at PHC level. The diagnosis was not done within 24 hours after collection of blood slides from peripheral health facility in the available setting. There was block of slides in Churra block. ***All Lab technicians were trained in malaria microscopy expect Churra block LT. The diagnostic kits were utilized at Microscopic center and indoor department.***

RDK were available at all Health centers and distributed via sector supervisor from block level. The all record is maintained by MTS or LT.

Impression: *The malaria microscopic centres should be established at high endemic PHCs for early diagnosis and prompt and complete treatment. Difficult area should be focused for surveillance and early diagnosis by RDK.*

Early diagnosis and treatment:

RDK was available in surveyed blocks and PHCs. Data regarding distribution and stock position are available. The quantity of RDK is sufficient to meet technical requirements, but the distribution pattern is not as per guidelines.. Only 3 Mitanin of Gariaband block have been provided with RD kit while other Mitanin in the villages have not been provided with RDK. The quantities supplied need to be enhanced. The distribution of RDT is reported to have been made by the desired criteria (burden of disease and distance from microscopy center), but this may not apply consistently

Vector Control:

Bed nets: *Area of LLIN distribution has not been identified and provision of LLIN has not been mentioned in PIP 2013 -14, but the fact is that there are many HSC which is difficult to reach and belongs to high endemic blocks, those HSC should be focused for LLIN.*

Hatcheries: hatcheries are constructed in high endemic CHC but use of Gambusia fish was not observed.

IRS:

In the Current IRS micro plan, the population targeted under Manpur in IRS has increase from 33965 to 74928. The reason behind that was due to the outbreak in the villages, which having API less than 2 become more than 2.

IRS manpur:

BLOCK	Insecticidal	Population target	No of population covered	Room target	No room covered
Manpur	**DDT**	**33965**	**29869**	**6793**	**6734**

Gariyaband Block

Round	Total Pop	Target Pop	RECEIVE INSCTISIDE IN KG.	TOTAL HOUSE	SPRAYED HOUSE	% OF SPRAYED HOUSE	TOTAL ROOMS	% OF COMPLETE SPRAYED ROOMS	NO. OF FAMILY IN SPRAYED ROOM	% OF SPRAYED POPULATION
1	98809	57201	7800	13258	10140	76.48	56028	91.07	10140	86.86
2	98809	57201	4074	13258	11446	86.86	56028	92.8	11446	94.19

Involvement of ASHA: *No involvement of ASHA in the Manpur and Chhura block. there were not preparing the slides from fever patients as shown in the block report. RDK and ACT were not distributed in the surveyed blocks. The modular training is on-going at Gariaband block. Incentives not being paid to Mitanin – mode of payment and record keeping under debate despite of provision of fund.*

Logistics:
During and after epidemic Logistics are adequate in all health facilities in all surveyed blocks. Tablet Chloroquine and ACT were in excess quantity in Manpur block. Strict vigilance on the expiry date and if needs shift the stock to other block or district as per need.
All drugs and logistics are maintained by LT and MTS in the surveyed blocks. The record keeping was not proper at Chhura block.

Monitoring / evaluation / data use:
M forms formats used are not below the block due to lack of training to Peripheral health workers uniform / consistent. Supervisory visits by DMO / VBDC are infrequent, not as per protocol, largely due to inadequate mobility support, even during IRS. LQAS not performed after one round in Mar-May 2011, because forms not printed and provided to district; no data collection occurred during transmission season 2011.

LQAS status: *LQAS survey was completed in Manpur and Gariaband district by MTS. They have compiled and forward the report to the state. The finding are very crucial related to involvement of ASHA in the module 3.*
There is no local action after LQAS survey. The DMO and BMO should take immediate step on LQAS finding for further improvement and sustained the existing programme activities. The results thus generated will enable close monitoring of the efforts of PHC staff and ASHA (or equivalent local trained providers), and thus enable mid-course corrections at decentralized levels.

PIP 2013: *In PIP 2013, The head wise budget are mentioned without its proper micro plan and justification specially in training and IEC. The mitanin incentives are put in current PIP without details.*

Recommendations:

- Vacant posts of district level consultants and peripheral health workers to be filled at the earliest . There is a shortage of manpower at different levels in both the district (Lab technicians, MPHWs, health supervisors, ANMs)
- Establish the microscopy facility below the block i.e. PHC in difficult and inaccessible area of malaria endemic blocks.
- Identify trained Mitanins / other volunteers in areas not readily accessible to microscopy facilities i.e hard core inaccessible and difficult area .
- Microscopy centers to be made fully functional by providing functional microscopes and training of LTs
- All Pf cases to be treated with ACT, desirably within 24 hours of diagnosis
- Existing practice of treating suspected malaria cases with full therapeutic dose of CQ may be continued until diagnostic facilities are strengthened, but PQ should be restricted confirmed positive cases, as per protocol; patients given CQ should be given ACT if found to be Pf.
- Necessary to ensure that standard diagnosis and treatment protocols are followed in all hospitals; this includes giving ACT after parenteral artemisinin/quinine in cases of severe malaria.
- All suspected malaria cases should be epidemiological investigated in the field as well as sentinel site. The coordinate should be develop between the IPD and Sentinel site for proper reporting of suspected and confirmed malaria deaths.
- The IDSP should give early warning signals of epidemic of fever for early intervention .
- PIP should be prepared based on the facts and figures . budgetary provision should be made based on the details activities which was not done in last PIP.
- Ant larval measure for malaria control should be replenish in area where hatcheries are developed.