# Rapid Assessment of IMNCI Programme in Bhavnagar District, Gujarat

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**Abstract: Background & Objectives:** The desired impact of IMNCI is the reduction of mortality, morbidity and suffering, through assuring children's access to quality health care in health facilities and improved case management at home. Maintaining the performance of health and village workers is essential to achieve this impact. So objective of this study is to assess IMNCI implementation in Bhavnagar district of Gujarat to strategize for accelerating effective implementation. **Methods**: A cross sectional study was carried out in March 2012 in Bhavnagar district. Four blocks of Bhavnagar district were purposefully selected out of seven blocks on the basis of immunization coverage of previous year. From each block one best PHC and from selected PHC one best sub-centre and one best Anganwadi were selected purposefully by solely on basis of perception of Medical Officer in charge PHC and BHO for implementation of IMNCI in their area in last one year. The purpose of adopting such method was to evaluate the performance of IMNCI implementation in centres (PHC, SC, AW) that was judged best by their supervisors. After selection, PHC, SC and Anganwadi centre were visited to assess the practice of IMNCI by ANM and Anganwadi Worker. Medical Officer, Health Supervisors and ICDS officers were interviewed to understand overall implementation process. For collecting data pre-tested and predesigned questionnaire was utilized. **Results**: Basic IMNCI training in Bhavnagar was completed in 90% of health and ICDS workers. More than 87.5% workers said that their knowledge, skill, confidence and credibility among community were increased after IMNCI training. Logistic and drugs supply were insufficient at sub centre and Anganwadi centre. Out of the total 80 filled IMNCI case sheets by the health and ICDS workers, 32(40%) were found accurately complete as the correctly filling of all the column (assessment and classification and treatment) in form considered as complete form. Accurate classification, management and advice of cases according to IMNCI guidelines were 62 (77.5%), 42 (52.5%) and 38 (47.5%) respectively as the accurate classification (assessment, classification and treatment) of the entire column in form correctly. Combination of one correct and other incorrect assessment or classification or treatment considered as partial accurate and inaccurate if all the column were not assessed or not classified or not given the treatment correctly. While observing actual practice of IMNCI, accuracy among health and ICDS workers was found in assessment 5(31.3%), Classification 8(50%) and treatment 7(43.8%). Supportive supervision and feedback mechanism were lacking at all level. **Interpretation & Conclusion:** Supportive supervision and feedback mechanism are key concern and must address. Proper logistic and drugs planning and management also main concern for IMNCI programme. [Patel H et al NJIRM 2013; 4(6) : 54-58]

**Key Words**: IMNCI, Implementation, Rapid Assessment

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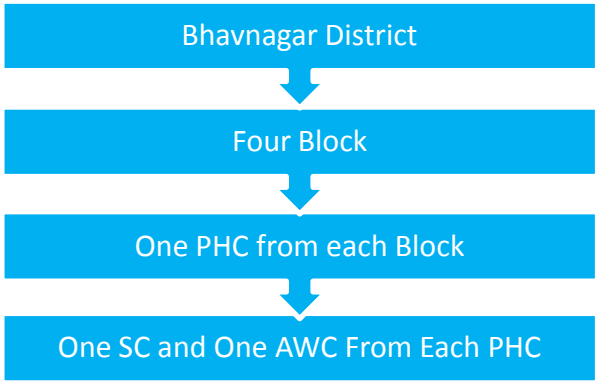
**Introduction:** The pace of decline in the infant mortality rate (IMR) in India is insufficient to achieve the targets set up under the XI National Five Year Plan or to reach the Millennium Development Goals.[1] The most common causes of infant and under five child mortality in developing countries (including India) are perinatal conditions, acute respiratory infections, diarrhoea, malaria, measles and malnutrition. According to the National Family Health Survey III data in India, the common illnesses in children younger than 5 years of age were fever (15% prevalence in the previous 2-week period), acute respiratory infections (6 %), diarrhoea (9%) and malnutrition (46%) and often a combination of these conditions. Infant Mortality Rate in India continues to be high at 57/1000 live births and Under Five Mortality Rate at 74/1000 live births (NFHS-III). Neonatal mortality contributes to over 64% of infant deaths and most of these deaths

occur during first week of life. Mortality rate in the second month of life is also higher than at later ages. Any health program that aims at reducing IMR needs to address mortality in the first two months of life, particularly in the first week of life.[2]

Gujarat is the first state in India to scale up IMNCI implementation to the entire state in a phased manner. For implementation of IMNCI in each district about 18-24 months required to complete the training of health and ICDS functionaries.[3]The desired impact of IMNCI is the reduction of mortality and morbidity, through assuring children's access to quality health care in health facilities and improved case management at home. Maintaining the performance of health and village workers will be essential to achieve this impact. So assessment of IMNCI implementation in Bhavnagar district of Gujarat was carried out to have an idea about implementation status of IMNCI program in the district.

**Material and Methods:** A cross sectional study was carried out in March 2012 in the selected PHCs of Bhavnagar district according to guideline provided by UNICEF, Gujarat. Keeping in view the objective of the study design includes collection of primary data and review of secondary data by




pre-tested and pre designed questionnaire prepared by UNICEF. Four blocks of Bhavnagar district were purposefully selected out of seven blocks for the assessment on the basis of immunization coverage taking into account of immunization coverage of block, PHC and Sub centre of previous year. From each block one best PHC, and from selected PHC one best sub-centre and one best Anganwadi were selected purposefully by solely on basis of perception of Medical Officer in charge PHC and BHO for implementation of IMNCI in their area in last one year. The purpose of adopting such method was to evaluate the performance of IMNCI implementation in centres (PHC, SC, AW) that was judged best by their supervisors. After selection, PHC, SC and Anganwadi centre were visited to assess the practice of IMNCI by ANM and Anganwadi Worker. Medical Officer, Health Supervisors and ICDS officers were interviewed to understand overall implementation process. District health and ICDS officers were also interviewed to understand overall performance, salient features and constraints in implementation. District Training Centre was also visited to assess the training system and facilities.

**Results and Discussion:** According to records of DTC Bhavnagar District, Gujarat, basic IMNCI training was completed of 90% of health and ICDS workers and supervisory IMNCI training was completed of 85% of health and ICDS workers. As per Bhatt RA et al Mehsana District, Gujarat state, 79.46% of Medical and Para medical persons of PHC were trained in Basic IMNCI.[4] As per Pavitra Mohan et al, the number of workers trained per year per district ranged from 208 to 1,285 across different states, with a median of 562. Among them only 3% were Medical Officers, 56% were Anganwadi Workers and rest were other paramedics. Only two states, i.e. Chhattisgarh and Gujarat, were able to train more than 1,000 workers per year per district. [5]

At district training centre Bhavnagar, two classrooms were available for IMNCI training and in each room had functional TV and DVD player, chalk and board, Baby doll, charts, utensil for preparing ORS solution. Accommodation facility for Participants was available at training centre. Sufficient training budget was available for conducting training.

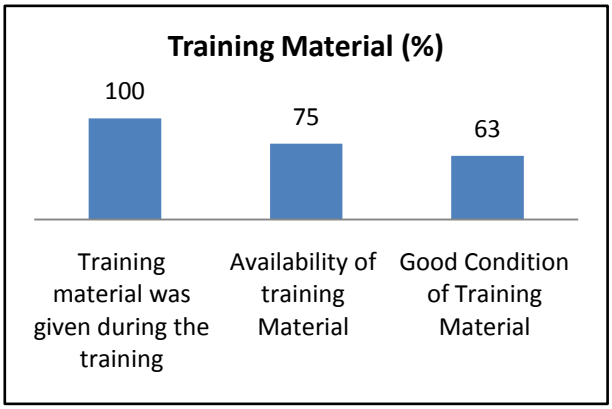
**Table: 1 Facility at District Training Centre**

| | |
|---|---|
| Classroom | Two |
| Audio -visual aids | TV & DVD player in each |

| | room |
|---|---|
| Training material | Sufficient |
| Equipments | Available |
| Accommodation | Yes |
| Training budget | Sufficient available |

Usually twenty four participants were included in each training programme of eight days. Health and ICDS workers were trained together. For medical officer training were conducted at PSM department, Government medical college Bhavnagar.

**Figure: 1 Training Materials**




All the Heath and ICDS workers were trained before 24 months. All workers were received training materials during IMNCI training but at the time of interview only 75% workers were having IMNCI manual, chart booklet and photograph book. Only 63% workers were having training material in good condition. As per workers opinion during training 100% workers said that video shows, role play and hospital visits were conducted, but only 50% workers said community visits were conducted. Regarding training impression among health workers 88% found it very useful of material provided during training. Only 50% perceived trainers were communicative. Only 50% health workers started practicing IMNCI Immediately after training and remaining started after one month after training. More than 87.5% workers said that their knowledge, skill, confidence, credibility among community were increased but workload was also increased without getting any financial incentive and this factor demotivating them.

**Table 2: Supply for IMNCI (n=8)**

| Equipments & Stationary | Available and working (%) |
|---|---|
| Infant weighing scale | 4 (50) |
| Salter weighing scale | 7 (88) |
| Thermometer | 3 (38) |
| Timer for counting Respiratory rate | 1 (13) |
| Case sheets / registers | 6 (75) |

At the time of assessment as per IMNCI guideline equipments and stationary were found inadequate. Workers were find difficulties in assessment and management of children due to unavailability of equipments and stationary. Availability of case sheets / registers was seen in only 75%; this will result in difficulty in record and reports.

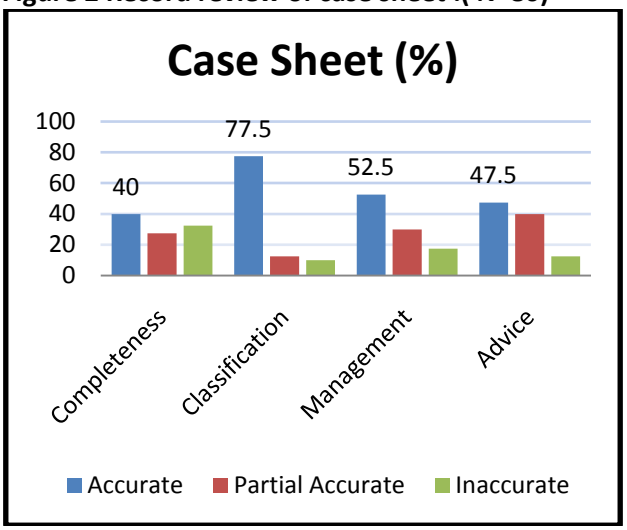
**Table 3: Supply for IMNCI: Drugs (n=8)**

| Drugs | Available (%) |
|---|---|
| ORS packets | 5 (63) |
| Tab. Paracetamol | 6 (75) |
| Syrup Paracetamol | 0 (00) |
| Tab.Cotrimoxazole | 0 (00) |
| Syrup Cotrimoxazole | 0 (00) |
| Gentian Violet paint | 2 (25) |
| Tab. Iron folic | 5 (63) |
| Syrup Iron folic | 1 (13) |

Supply of drugs to health and ICDS worker were irregular and insufficient. Stocks out of drugs were occurred frequently. At time of assessment drugs were found inadequate, this will result in poor management of sick children as well as may lead to loss of confidence in services provided by Health and ICDS workers. A study conducted by Bharani S et al also find similar finding. It one wants to strengthen the IMNCI program, availability of drugs is the main corner stone to achieve good results[6]. Accurate

completeness of IMNCI case sheet was 32 (40%) Accurate classification, management

**Figure 2 Record review of case sheet :( N=80)**



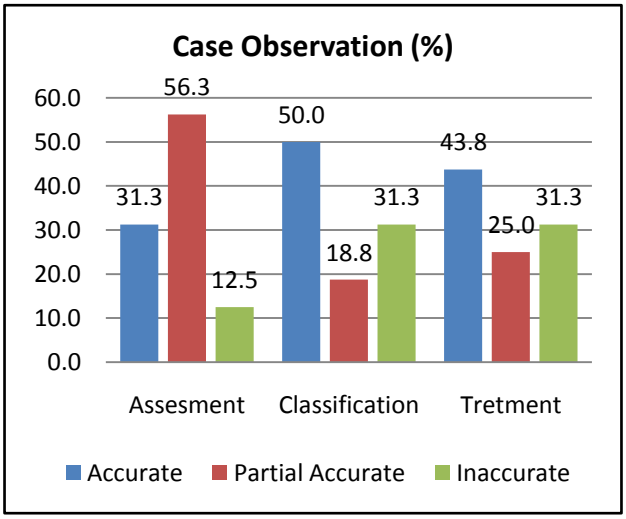

and advice of cases according to IMNCI guidelines were 62 (77.5%), 42 (52.5%) and 38 (47.5%) respectively. This will result in inappropriate classification, wrong management and advice to cases; ineffectiveness of IMNCI programme.

A study conducted by Bhatt RA et al shows that during survey, when records were reviewed classification was found to be complete and accurate in 88% case sheets but the management (62.7%) and advise (57.8%) were not up to the mark. [4]

As per IMNCI guidelines accuracy of assessment 5 (31.3%), Classification 8 (50%) & treatment 7 (43.8%) were observed in Health and ICDS workers. A study conducted by Bharani Sheela et al shows that AWWs did not do well in identifying sick child of 2 months to 5 years age group. Only 8% AWWs had scored >40% in identifying different skills in age group of 2 months to 5 years. [6] A study at Kenya found that less than 10% of the children received an accurate complete assessment. Less than one-fifth were correctly classified and only 60 percent of sick children received correct treatment.[7]

All blocks & PHCs had supportive supervision plans but all the supervisors did not follow the plan because many other works they have to perform and all perceive that this program not much priority required. Supportive supervision was lacking at all levels. Similar findings were found in study conducted by Bhatt RA et at Mehsana district, North Gujarat, India.[4] Intersectoral coordination between ICDS and Health at block and PHCs level was not satisfactory. Upwards flow of IMNCI data regularly from PHCs to blocks to district but no feedback system. Grass root level health and ICDS workers also not gave priority to IMNCI programme, their queries were not solved and ultimately Implementation of IMNCI programme deteriorated.

**Figure 3 Case observations :( N=16)**




**Limitations:** In Bhavnagar district study was conducted in only four SC, four Anganwadi centres, and in four PHCs. Sample size may be insufficient to extrapolate data to entire district.

**Table 4: Finding & Classification (Dr. H.M.Patel)**

| Finding | Classification | Treatment/Action needed |
|---|---|---|
| Training level by DTT/MC /State level | Green | Home based reading of module |

| | | |
|---|---|---|
| Logistic and drug Supplies by District level/BHO | Yellow | Provide drugs and logistics to all level |
| Filling of forms at SC/AWW/ PHC LEVEL | Red | Starting of filling forms and reporting Review in meeting Supervision by MO Level/CDPO level |

**Conclusion:** IMNCI programme for improving child health idealistic but in realistic condition implementation of IMNCI program was not as per guideline. All the ICDS and health workers as well as supervisory staff were well trained. All the staffs recognize one of the finest training they attain in different approach. But in real condition at grassroots level majority of staff had difficulty in implementation of IMNCI programme. There were insufficient supplies of drugs and stationary and inadequate equipments. Many of workers perceived that their work load was increased. These factors de motivated them. For PHCs and Block level supervisors IMNCI was non priority programme. Supportive supervision, feedback mechanism, Intersectoral coordination and Proper logistic planning and management at all level for health and ICDS workers is required for accurate classification, management and advice to children.

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