Follow-up after training on IMCI

Background: In India, Acute Respiratory Infections especially pneumonia, diarrhoea and under nutrition account for a large number of deaths in children below five years of age. These deaths are preventable, if treated timely and correctly. Since the BHWs are responsible for providing health care to the children in the community and they are the first to be contacted when children are sick. The BHW training course on Integrated Management of Childhood Illness (IMCI) is designed to help them acquire technical as well as communication skills to manage sick children in an integrated and effective manner. In the order to reduce the morbidity and mortality among children in the age group of 2 months- 5 years, the Anganwari Workers were trained on IMCI course which included assessment of the child, classification of diseases, identifying treatment, providing treatment, counseling mothers about homecare, feeding of the child and follow-up. Whenever a new skill is imparted to any person, it is accepted better if it is backed by follow-up visits to reinforce learning. This gives added confidence to the individual and motivates them to incorporate IMCI in practice. That is why the 288 Anganwari workers trained earlier on IMCI were followed up by the supervisors who were trained both on 5 days IMCI course as well as 3 days training on follow-up visits after training.

Objectives:-

To train supervisors as well as the BHWs on technical skills of:

- Early referral of seriously ill children in the age group of 2 months-5 years.
- Treating children with dehydration by ORS.
- Treating children with pneumonia by co-trimoxazole.

To train them on communication skill of:

- Advising mother on feeding
- Giving fluids
- Relieving cough by homemade cough remedies.
- Observing the child for selected signs for follow-up.

To make supervisors able to:

- Plan and prepare for follow-up visits.
- Conduct follow-up visits using various protocols like review of records, case observation to see the skill of the BHW, review of facility support, etc.

Methodology: It was implemented in 4 districts of Haryana namely Panchkula, Yamunanagar, Sonepat and Gurgaon. From each district 3 blocks were chosen and in each block 24 Anganwadi workers were selected. A total of 288 Anganwadi workers were trained using the 5 days WHO package for IMCI for BHW by the master trainers:

District	Block	No. of AWWs trained
Panchkula	Pinjore	24
	Barwala	24
	Raipur Rani	24
Yamunanagar	Jagadhari	24
	Bilaspur	24
	Radaur	24
Sonepat	Rai	24
	Sonepat	24
	Ganaur	24
Gurgaon	Nuh	24
	Sohana	24
	Gurgaon	24

Figure 1: Selected blocks from study area

After the training of AWWs, the supervisors for IMCI were trained using the same 5 days package for BHWs on IMCI. 19 supervisors including block supervisor and CDPOs were trained in the 1st round. As it was decided that each

supervisor will give follow up visit to 10--12 anganwadi centers, the no of supervisors required was at least 24. Since some of the supervisors trained earlier on IMCI were not available due to the transfer to another area to provide their services for follow-up after training of the AWWs. Another 5 day's training workshop was organized to train additional supervisors. Thereafter supervisors wore trained in conducting follow up after training visits. A 3 days training was organized using the WHO package — Follow up after training for IMCI. This prepared the supervisors for conducting follow up visits in a uniform and systematic manner.

S.No.	Type	Duration	Date	Nos.
1	Training of master trainers on IMCI	5 days	Oct, 99	
2	Training of AWWs	5 days	Nov' 01 – Jan' 02	288
3	Training of supervisors 1st Round	5 days	Aug 01	19
	Training of supervisors 2nd Round	5 days	18-22 Nov' 02	16
4	Follow up after training of supervisors	3 days	11-13 Dec'02	19
5	Orientation of AWWs	1 day	Dec-Feb' 03	288
6	Actual follow up		15 Jan' 03–28 Feb' 03	278

Table 1: Sequence of Training Course Organised

However, since there was a gap of nearly 1 year between the training of the AWWs and the follow up, it was decided to organize a 1 day refresher training for the AWWs of each block along with their supervisors as facilitators. During the refresher trainings dates for actual follow-up visits were finalized in consultation with the respective AWWs. Following the 1 day training, 4-6 weeks of time gap was given before conducting the follow up visits. The follow up visits were conducted by the trained supervisors. This was done along with their usual follow up visits over a period of 1 month.

Ten percent of the total follow up visits were supervised by the master trainers as a quality control measure. Since, the level of agreement in findings of the master trainers and supervisors was nearly 90-95%; the remaining follow up visits were conducted by the supervisors independently.

The following flowchart represents the sequence of events:

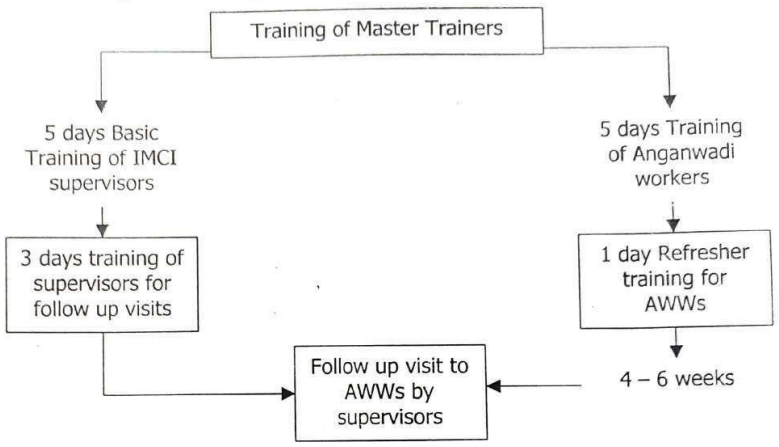

Figure 2: Sequence of events

Training for CPDOs and supervisors of Haryana

- The training materials very good comprised of standardized technically sound text. Methodology used to learn was equally good.
- Communication and counseling skills were well illustrated through role play and discussion. The participants 'acted as mother and health care provider and conducted problem-solving sessions.
- Participants were able to see signs: like chest in drawing, fast breathing, underweight, palmar pallor during clinical practice in the community.

- Participants were active, interested, motivated and appreciative of the training.
- Training materials were readily available.
- Facilitator and participants ratio was excellent. Efficient administrative arrangements helped in the success of training programme.
- Training on the first day was started 2 hours late from the scheduled time as participants from Gurgaon & Sonepat came from their headquarter on that day only. They were tired and could not participate very actively on the first day.
- Participants were not able to see signs of severe illness like lethargic or unconscious, not able to drink, very slow/slow skin pinch and odema feet during clinical practice. However, the skills of the participants to recognize these signs were strengthened through video and photographs.

One Day Orientation of BHWs on IMCI

- The trainers closely supervised slow learners and extra efforts were made to make them learn the skills better.
- Supplies of Cotrimoxazole, Paracetamol, ORS and Iron tablets were also provided to them.
- Since the supervisors of BHWs were also present planning of follow up visits was done and dates of follow up visits were finalized with the AWWs.
- During finalization it was kept in mind that the dates are according to the availability and convenience of the BHW.

Workshop on follow-up after training on IMNCI

- The training materials were good comprising of standardised, technically sound text.
- The venue was well equipped. All the facilities required for good quality training were available.
- Training material was readily available.
- Participants were quite active, interested, motivated and appreciative of the training. Facilitator and participant ratio was 1:3. Efficient administrative arrangements (food, stay, transport, etc.) helped to conduct the training programme efficiently and effectively.
- Three participants who were initially invited to participate in the training programme could not do so because they had to attend some other training programme organised on the same dates. They had to be replaced at the last moment. As a result these participants arrived very late.
- Extra efforts were made to bring them at par. Four participants were not able to read the material which was in English. They were either assisted by facilitators or paired with a good participant.

Follow-up Visits after training by supervisors

They examined the cases independently and along with AWW and filled finding on case observation form

	BHW
General danger signs looked for	158 (64.5%)
Presence of cough or breathing difficulty asked for	235 (95.9%)
Presence of diarrhoea asked for	189 (77.1%)
Presence of undernutrition or anemia looked for	205 (83.7%)
Presence of fever asked for	154 (62.9%)
Presence of other problems asked for	209 (85.3%)
Immunization status assessed	160 (65.3%)

Table 2: Assessment of sick children (n=245)

Feeding	AWW
Feeding assessment done (n=186)	82 (44.0%)
Feeding problems identified (n=98)	59 (60.2%)

Table 3: Feeding advice

Follow up	AWW
When to return immediately told (n=213)	98 (46.0%)

Table 4: When to return immediately

Results of Review of records:

Follow up column not filled	112 (45.7%)
Incorrect filling of forms	94 (38.4%)
Breathing rate not written	64 (26.1%)
Undernutrition not assessed	102 (41.6%)
Wrong classification	48 (19.6%)
Wrong treatment	28 (11.4%)

Table 5: Common problems identified in registers (n=245)

Result of review of facility support:

SUPPLY	Health facility
IMCI Register	242 (98.8%)
Laminated charts	243 (99.2%)
Referral cards	158 (64.5%)
Weighing scale	240 (98.0%)
Wrist watch	129 (52.6%)
Timer	0 (0.0%)
Thermometer	0 (0.0%)
1 lit measurement	74 (30.2%)
Safe drinking water (piped water)	194 (79.2%)
Cotrimoxazole (50 Paediatric tablets)	237 (96.7%)
ORS packets (10 packets)	89 (36.3%)
IFA tablets (200 Paediatric tablets)	146 (59.6%)
Paracetamol (10 tablets/bottles)	100 (40.8%)
Vitamin A (1 bottle)	83 (33.9%)

Table 6: Review of facility support

Monitoring visits by master supervisor:

Diagnosis	Correctly assessed		Correctly classified		Correctly treated	
	BHW	Sup.	BHW	Sup.	BHW	Sup.
Pneumonia (n=8)	6 (75.0%)	7 (87.5%)	5 (62.5%)	7 (87.5%)	4 (50.0%)	7 (87.5%)
No pneumonia (n=24)	22 (96.6%)	24 (100%)	22 (91.6%)	24 (100%)	18 (75.0%)	23 (95.8%)
Diarrhoea with no dehydration (n=4)	2 (50.0%)	4 (100%)	2 (50.0%)	3 (75%)	2 (50.0%)	3 (75.0%)
Anemia (n=5)	4 (80.0%)	5 (100%)	4 (80.0%)	5 (100%)	3 (60.0%)	4 (80.0%)
Fever (n=1)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)

Table 7: Management of sick cases

Report of record review

Follow up column not filled	8 (24.2%)
Incorrect filling of forms	10 (30.3%)
Breathing rate not written	4 (12.1%)
Undernutrition not assessed	8 (24.2%)
Wrong classification	4 (12.1%)
Wrong treatment	8 (24.2%)

Table 8: Common problems identified in register (n=33)

Complete materials carried by supervisors	25(75.7%)
Cases in register counted personally	32(96.9%)
Physical verification of facility supplies & equipment	18(54.5%)
Medicine counted	21(63.6%)
Expiry of medicines checked	14(42.4%)

Table 9: Results of Monitoring of the supervisors

Key highlights:

- In case management, assessment of the various broad categories like danger sign, cough, diarrhoea, undernutrition and anemia was done by 65% of the AWWs. Asking for fever,—danger -sign-s---and immunization- was frequently missed. May be it is due to the fact that the child does not look seriously ill and keeping immunization records is a part of their routine activity. Out of a total of 7 referral cases 6 were correctly identified and referred to the first referral unit. Only one case of severe under nutrition was missed.
- In cases with cough 88.5% were correctly classified. However, correct treatment i.e, correct dose and duration of co-trimoxazole was 100% in those cases which were identified and classified as pneumonia. In 90.2% of cases of no pneumonia, correct home advice was given and these children did not receive antibiotics unnecessarily.
- In diarrhoea cases, 82.1% were correctly classified, 1 case each of persistent diarrhoea and dysentery were correctly identified and referred.
- There were 39 cases of diarrhoea with no dehydration. Out of these 32 (82.1%) cases were correctly classified, but 76.9% was correctly treated/advised.
- 76.7 % cases were correctly classified for under nutrition and anemia. 88.9% of anemia cases were correctly classified. However, out of those correctly classified for anemia, 77.8% could be treated correctly.
- In eases of fever, 75% was given correct doses of Paracetamol.
- Feeding assessment was being missed by AWWs too often. Out of 186 cases for which feeding assessment should have been done, only 44% were assessed. Out of those 90 cases that had feeding problems, only 60.2°/o could be identified by the AWW.
- Follow-up advice remained a weak area. Only 43% cases were told when to return immediately out of 213 cases where it should have been told.
- In the record review it was found that a total of 3283 cases were seen by 278 AWWs. Out of these, 1.6% had danger signs, 3.7% had severe pneumonia, 34% was pneumonia and 62% was no pneumonia.
- On the other hand as per the records, out of 615 children with diarrhoea 3% had severe dehydration, 34.3°/a had some dehydration and 51.5% had no dehydration. There were 7.4% cases of persistent diarrhoea and 3.5% had dysentery. Out of 1504 cases assessed for under nutrition/anemia 2.5% was severely undernourished, 19.1% was under nutrition and anemia and 78.3%, was found no under nutrition and no anemia.

- The main problems identified in records review were follow-up column was not filled, under nutrition not assessed, incorrect filling of forms and breathing rate not noted.
- In the facility audit, the IMCI material i.e. registers and three laminated charts were available with 99% of AWW. The supplies of medicines were present in nearly 96% of facilities though adequacy of the supplies was an issue of concern. Timers and thermometers were not present in any of the facilities and wrist watch with second hand was available only with 52.6% of AWWs.

Conclusion: Follow up visits after training are categorized under 3 main headings:

(a) Case Observation: The 5 day training on IMCI has provided the skills to BHW to identify children for common diseases which contributes to the high mortality in under five children. The BHWs usually miss out on steps during the assessment as the laminated charts are not being used and hence children are not systemically examined. On reminding, the assessment done is correct by majority of the AWWs which shows that they have acquired skills satisfactorily.

(b) IMCI Register: The AWWs have the training material and IMCI registers in their facility. However, the numbers of cases seen were low. Contributing factors are mother's do not know about the presence of such facilities in the AWC, lack of faith on AWW and more dependence on Registered medical practitioners (RMPs), and lack of self confidence in the AWW.

(c) Facility Support Review: IMCI register & laminated charts are available with nearly all AWWs. The health facility timings are convenient for mothers and referral centres are usually within 2 hours distance although getting transport to travel is a problem.

Recommendations:

- Regular follow up visits by the supervisors to reinforce the skills in case observations are to be encouraged. More than one follow up visit is recommended.
- During all follow up visits the supervisor should encourage and motivate AWWs and solve problems. Strengthen the basic training of AWWs on feeding assessment and advice and also make relevant changes in IMCI laminated charts so as to strengthen the trigger for feeding assessment after assessing under nutrition and anemia.
- The use of laminated charts should be emphasized. The supervisors need to stress that mistakes can be minimized if these charts are used systematically in every case.
- For improving the demand for services at the village level, the AWW should call the PHC doctor in their village level meetings who can make the residents aware of facilities available in AWC for treatment of pneumonia and diarrhoea.
- For co-operation and collaboration of health and ICDS departments and to develop a referral system, the ANMs, LHVs, PHC and CHC doctors should also be trained.
- To make the AWWs accountable, a monthly comprehensive report of cases seen by AWW should be taken by supervisors during the monthly circle meeting. Adequate medicines should be made available to AWW as even with all the skills and absence of supplies/equipment, IMCI strategy cannot be implemented. The health system should provide logistic support in terms of medicine supply. Timer and thermometer should be made available to all AWWs.