

Research Article

Aligarh Model for Strengthening Comprehensive Child Survival Programme through Supportive Supervision (S-CCSP-SS)

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ABSTRACT

On 10 May 2002, the United Nations General Assembly urged all governments of the world to 'put children first', to leave no child behind and to ensure for every child a nurturing and safe environment that enables their physical health, mental alertness and emotional security. Every child has the right to be known, to be respected, to be safeguarded against suffering or fear and to be confident of a safe, peaceful and happy childhood, with caring attention an assurance, not a despairing doubt. India is among the countries that have declared their commitment to these rights. Unfortunately, the reality for millions of Indian children is neither safe nor peaceful nor happy. In this background, the Aligarh Model for child survival may be considered by different agencies for ensuring children's right to life.

Keywords: Infant Mortality Rate, ASHA, ANM, Supportive Supervision, Integrated Management of Neonatal and Childhood Illnesses, Comprehensive Child Survival Programme, Home Visit, Counselling

INTRODUCTION

World wide, about 40% of child deaths occur during the first month of life. (WHO, 2012). The latest evidence is that 4 million babies die each year in their first month of life, and up to half of these die in their first 24 hours – a child is about 500 times more likely to die in the first day of life than at one month of age. Neonatal mortality accounts for almost 40 per cent of all under-five deaths and for nearly 60 per cent of infant (under-one) deaths (http://www.unicef.org/sowc08/docs/sowc08_panels.pdf Uttar Pradesh (UP) in general and Aligarh district in particular have high infant mortality rate (IMR). Neonatal mortality rate (NMR – infant deaths within 4 weeks of life per 1000 live births) at 48 accounts for 70 per cent of the IMR, whereas early NMR (infant deaths within 1 week of life per 1000 live births) at 36 accounts for 75

per cent of the NMR (http://www.mohfw.nic.in/NRHM/Documents/High_Focus_Reports/UP_Report.pdf). IMR of UP was 61, much above the national average of 47 and very high compared with some states such as Kerala at 13 (Registrar General 2011). Recently, it has been reported that the IMR of UP has marginally reduced to 57 but is still above the national average of 44 (Ians 2012). The IMR of Aligarh is dismal at 67, which calls for intensive efforts for its reduction. One of the crucial reasons for this problem is the high mortality rate of the child. It has been rightly pointed out that the gap in government's child survival initiatives is the lack of an in-built mechanism of follow-up and supportive supervision. The Multi-Country Evaluation of Integrated Management of Childhood Illness (IMCI) Effectiveness has rightly pointed out in this connection that inadequate

or weak supervision in most countries has resulted in addressing the issue of ineffective child survival programmes. Local-level support for correct performance of health workers, including supportive supervision, must be established and sustained (Arifeen 2005). In 2009, the IMR of Aligarh at 73 was alarming. Aligarh district is placed in the list of 57 common districts that feature in the top 100 districts in order of IMR (http://www.censusindia.gov.in/CensusWebResults.aspx?cx=012918038926302546381%3Ajjz7p38u6ma&cof=FORID%3A9&q=www.censusindia.gov.in/vital.../files/IMR-MMR-DISTT_AHS2.xls&sa=Search#1200). To address this challenge, in 2009, a project on ‘Supportive Supervision of Comprehensive Child Survival Programme’ (SS-CCSP) was taken up in six blocks of Aligarh district by the Department of Sociology and Social Work (Aligarh Muslim University [AMU], Aligarh), with support from United Nations Children’s Fund (UNICEF). The programme was implemented in close coordination with the District Administration of

Aligarh. Phase I (July 2009 to June 2010), Phase IIa (July 2010 to March 2011) and Phase IIb (April 2011 to September 2011) produced encouraging results in terms of Accredited Social Health Activists’/Auxiliary Nurse Midwives’ (ASHAs’/ANMs’) assessment skills and eventually saving the lives of many children. One of the key components of the National Rural Health Mission (NRHM) is to provide every village in the country with a trained female community health activist, i.e. ASHA (<http://www.mohfw.nic.in/NRHM/asha.htm>). The ASHAs were provided supportive supervision with regard to their skills in assessment of newborn’s illnesses. The current project, entitled “Strengthening of Comprehensive Child Survival Programme Through Supportive Supervision (S-CCSP-SS) in Aligarh district (October 2011–December 2012), themes around strengthening the CCSP programme and sustainability for scalability. It focuses on the reduction of IMR and feasibility of replication of AMU, the Aligarh Model, by governmental agencies in India and abroad in general and UP in particular.

BACKGROUND OF THE ALIGARH MODEL

Phases	Blocks Covered	Activities
Phase I (July 2009–June 2010)	Six selected blocks	Supportive supervision of CCSP trained ASHAs to manage neonatal illness (0-to 2-month new born assessment format)
Phase II (a) July 2010–March 2011 and (b) April 2011–September 2011	Six old blocks	Supportive supervision of ANMs/LHVs to achieve a skill performance level (0- to 2-month new born assessment format) Complete maintenance of Village Health Index Register (VHIR) by ASHAs and RI Register by ANMs Support ASHAs to develop effective counselling skills to tackle harmful traditional practices affecting newborns through group meetings. Support organising routine immunisation sessions effectively Sensitising PRIs and linking ASHAs/ANMs for smooth functioning of Village Health Sanitation Committees (VHSCs). Continuing support of ASHAs on line of Phase I
3. Ongoing Phase (Oct-Dec 2012)	Six New Blocks Twelve Blocks	Phase I replication 1. Performing Supportive Supervision through a Joint Work plan of ANMs and ASHAs. Ensure supervision by Block level officers MOICs/HEOs/Health supervisors

RESEARCH DESIGN AND DATA

This study was conducted as a part of supportive supervision intervention for CCSP in Aligarh district. The ASHAs/ANMs were supported in their skills for assessment of infant illnesses per the Integrated Management of Neonatal and Childhood Illness IMNCI/CCSP protocol. The performance was assessed based on twenty variables regarding newborn care. Data was collected from the 0-to 2-month child assessment format, recorded by ASHAs/ANMs. The data was collected according to Form-5 prescribed by the IMNCI/CCSP guidelines.

RESULTS OF PHASE I OF CCSP SUPPORTIVE SUPERVISION PROJECT

The major findings of the supportive supervision activities – based on the analysis of work carried out until June 2010– are as follows:

- Out of 1166 ASHAs sanctioned, 1100 ASHAs are in position in the 6 blocks of Aligarh district and 993 ASHAs have been trained in CCSP.
- A total of 905 ASHAs were supervised in the first round, 878 each in the second and third rounds, 842 in the fourth round, 853 in the fifth round and 850 in the sixth round. Each round had a duration of approximately 2 months.
- The key findings related to the performance of ASHAs under CCSP for the first and sixth round visits, regarding home visits, case management and record keeping, are provided in Table 1 and Figure 1.

Based on the results of AMU experience of CCSP supportive supervision in six blocks of Aligarh, the remaining six blocks of Aligarh were proposed to be

Table 1: ASHAs' CCSP Skill in Phase I

Area of Assessment	ASHAs performing correctly during first supervisory visit, July–September 2009 (N = 905)		ASHAs performing correctly during sixth supervisory visit, May–June 2010 (N = 850)	
	No.	%	No.	%
Assessment of PSBI	661	73	743	87
History of convulsion in proper language	295	33	679	80
Counting of respiratory rate	393	43	717	84
Looking for chest in-drawing	469	52	731	86
Looking for nasal flaring	480	53	728	86
Listening for grunting	403	45	681	80
Asking and feeling for fever	378	42	719	85
Looking for lethargy or unconsciousness	293	32	677	80
Looking for skin pustules or boil	558	62	715	87
Looking at umbilicus for redness or pus	570	63	726	85
Asking for diarrhoea	651	72	740	87
Assessing BF (attachment and suckling)	362	40	716	84
Asking for immunisation history	111	12	709	83
Asking for other problems	135	15	507	60
Using chart booklet for classification	75	8	614	72
Giving treatment according to classification	92	10	670	79
Counselling for homecare	112	12	684	80
Giving advice on breastfeeding	208	23	683	80
Performing home visit	117	13	785	92
Performing home visit on time, i.e. 1, 3 and 7 days	66	7	693	81

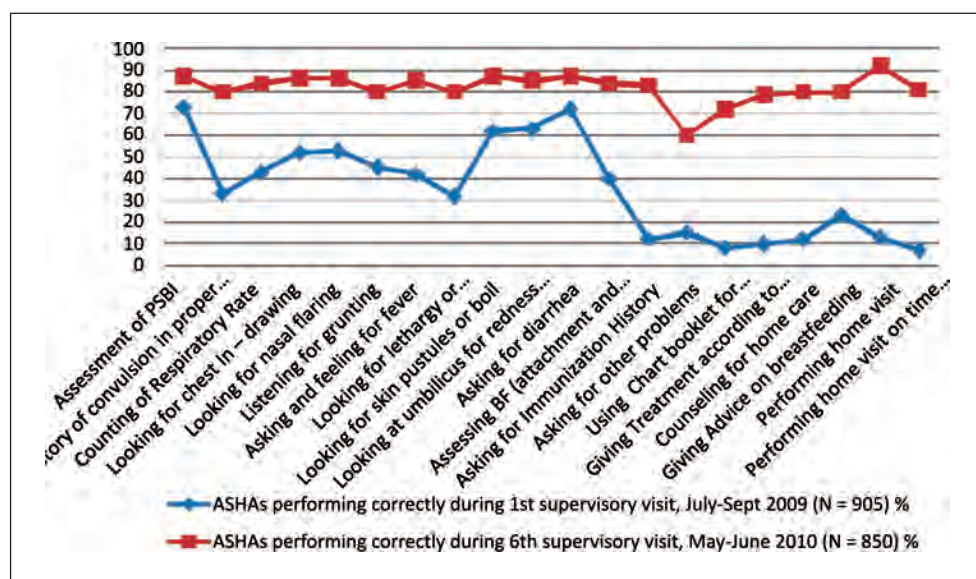


Figure 1: ASHA's CCSP skill in Phase I

taken up in the second phase of the project. Learning lessons from the AMU experience of the Government of Uttar Pradesh were also proposed to increase intervention across thirty-six districts of Uttar Pradesh, where the CCSP programme was taken up for implementation.

PHASE II OF CCSP SUPPORTIVE SUPERVISION PROJECT IN ALIGARH DISTRICT

Phase II operated in two subphases, i.e., Phase IIa (July 2010–March 2011) and Phase IIb (April 2011–Sept 2011) and was implemented in the whole Aligarh district as the remaining six blocks out of twelve were also selected.

Phase II of the CCSP Supportive Supervision project was proposed for implementation in Aligarh district, with the following objectives:

1. To demonstrate that the results were replicable, if scaled up to another six blocks of Aligarh district
2. To activate supervisory systems in the government to perform supportive supervision of CCSP for the initial six blocks of Aligarh district – through involvement of lady health visitors (LHVs) and ANMs – once a skill performance level of frontline functionaries is achieved

3. To add areas of maternal newborn and child health and nutrition other than CCSP in the gamut of skills of ASHAs to be strengthened through supportive supervision
4. To maximise the use of Behaviour Change Communication (BCC) strategies (group meetings) in addition to interpersonal communication during home visits as part of CCSP

RESULTS OF PHASE II OF THE SS-CCSP PROJECT: SUPPORTING ASHAS IN THE BUILDING UP CCSP SKILLS IN OLD BLOCKS

Table 2 and Figure 2 show that the project gained sustainability as the performance of ASHAs related to four crucial indicators either remained stable or increased over a period of time. It is important here to note that Phase II of the project in old blocks was launched after a gap of 3 months. In this context, it can be stated that the results are encouraging and indicate the sustainability of the project. During first round, 75 per cent ASHAs were able to classify the infants according to their health status. This percentage had increased to 76 per cent during the final round. Similarly, 1 percentage increase was recorded in the treatment of illness, which went up

Table 2: ASHAs' CCSP Skill in Phase II

Area of Assessment	ASHAs performing correctly during Phase II: 1 st supervisory visit, July–September 2010 (N = 886)		ASHAs performing correctly during Phase II: 4 th supervisory visit, July–September 2011 (N = 874)	
	No.	%	No.	%
Assessment of PSBI	776	88	762	87
History of convulsion in proper language	698	79	721	82
Counting of respiratory rate	760	86	735	84
Looking for chest in-drawing	764	86	745	85
Looking for nasal flaring	761	86	736	84
Listening for grunting	773	87	731	84
Asking and feeling for fever	760	86	710	81
Looking for lethargy or unconsciousness	708	80	731	84
Looking for skin pustules or boil	752	85	731	84
Looking at umbilicus for redness or pus	759	86	747	85
Asking for diarrhoea	775	87	755	87
Assessing BF (attachment and suckling)	760	86	760	86
Asking for immunisation history	757	85	723	83
Asking for other problems	612	69	626	72
Using hart booklet for classification	661	75	665	76
Giving treatment according to classification	727	82	722	83
Counselling for home care	741	84	758	87
Giving advice on breastfeeding	751	85	730	84
Performing home visit	782	88	792	91
Performing home visit on time, i.e. 1, 3 and 7 days	696	79	693	79

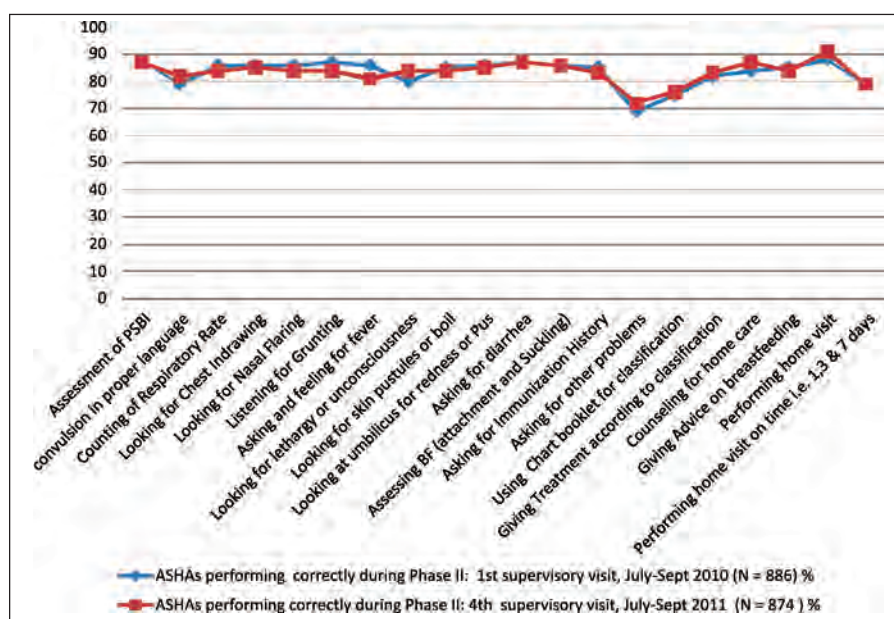


Figure 2: ASHAs' CCSP Skill in Phase-II

from 82 per cent to 83 per cent. Home visit also saw an increase from 88 per cent to 91 per cent. However, the percentage of home visits on time remained the same (i.e., 79 per cent during both the first and fourth supervisory visits).

Counselling for infant hygiene care and record keeping also increased from 84 per cent to 87 per cent and from a negligible 1 per cent to a spectacular 72 per cent, respectively.

SUPPORT TO ANMS IN OLD BLOCKS

ANM is a link between ASHAs and block health officials. She is assigned the task of organising Village Health and Nutrition Days (VHNDs) regularly, supervise ASHAs and visit newborn babies if in a critical stage. In this

way, ANM is a nodal frontline health functionary. Block supervisors supported ANMs in all tasks assigned to them and mainly focused on their capacity building for performing their task of CCSP. Estimates of the second and fourth rounds correlated with support to ANMs, as presented in Table 3 and Figure 3.

Supportive supervision to ANMs was initiated with Phase II of the project in July 2010 for the sustainability of project results. The objectives of the project were to activate the existing government supervisory cadre. ANMs' performance in assessment of neonatal/childhood illness according to the IMNCI/CCSP protocol was dismal in the first round of Phase II. They were not using the skills acquired after the CCSP training in their work areas. They were also unaware about their supervisory

Table 3: CCSP Skill of ANMs in Phase II

Area of Assessment	ANMs able to perform correctly during Phase II: 1 st supervisory visit, July–September 2010 (N= 138)		ANMs able to perform correctly during Phase II: 4 th supervisory visit, July–September 2011 (N= 132)	
	No.	%	No.	%
Assessment of PSBI	117	85	131	96
History of convulsion in proper language	35	25	95	72
Counting of respiratory rate	81	59	113	86
Looking for chest in-drawing	102	74	116	88
Looking for nasal flaring	97	70	113	86
Listening for grunting	65	47	108	82
Asking and feeling for fever	91	66	102	77
Looking for lethargy or unconsciousness	55	40	102	77
Looking for skin pustules or boil	71	51	112	85
Looking at umbilicus for redness or pus	89	64	119	90
Asking for diarrhoea	117	85	131	99
Assessing BF (attachment and suckling)	107	78	126	95
Asking for immunisation history	97	70	120	91
Asking for other problems	9	7	82	62
Using chart booklet for classification	50	36	90	68
Giving treatment according to classification	32	23	87	66
Counselling for homecare	38	28	94	71
Giving advice on breastfeeding	63	46	97	73
Performing home visit	0	0	82	62
Performing home visit on time, i.e. 1, 3 and 7 days	0	0	71	56

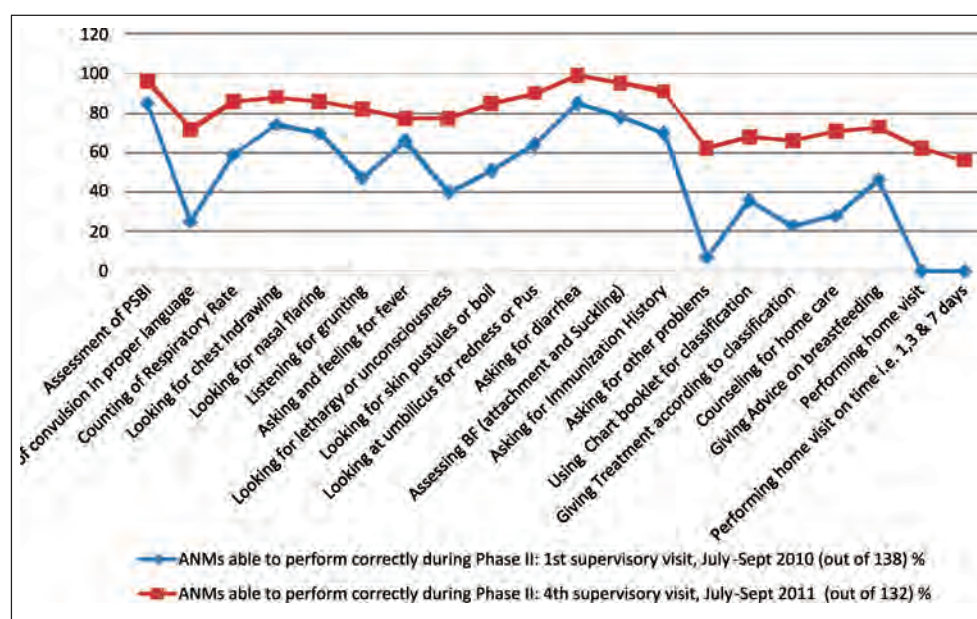


Figure 3: CCSP Skill of ANMs in Phase II

role and contribution they could make in reducing IMR through CCSP. The performance of ANMs was abysmally low regarding CCSP skills in the first round of Phase II. Because of regular intervention through supportive supervision, the assessment skills of ANMs improved in the fourth round of the Phase II in September 2011.

RESULTS OF PHASE II IN NEW BLOCKS

In Phase II, supportive supervision of ASHAs was initiated in six blocks in July 2010. Poor assessment skills of ASHAs in managing neonatal/childhood illness after their training of CCSP in in six old blocks when the project was started was found. New blocks' ASHAs were facing the same problem as the ASHAs in old blocks. There was no support provided after training. Therefore, performance of ASHAs in the new blocks was unsatisfactory in the first round of Phase II.

It would be appropriate here to mention that Phase II in new blocks focused on enhancing the capacity of ASHAs in performing their role in assessing the health of an infant, correct classification, referring, and so forth. Table 4 and Figure 4 show ASHAs performance with twenty

indicators. It is a matter of gratification that their performance increased substantially from the second to fourth round in all indicators mentioned previously.

PHASE III (OCTOBER 2011–DECEMBER 2012)

The ongoing phase is entitled as 'Strengthening of CCSP through Supportive Supervision (S-CCSP-SS) in Aligarh district'. This phase revolves around sustainability of supportive supervision through existing government resources. It focuses on advocacy for scaling up in other districts and states.

Activities/Objectives

- Performing supportive supervision through a joint work plan of ANMs and ASHAs
- Capacity building of ANMs/LHVs to ensure quality supervision of ASHAs and further supervisory sustenance
- Supportive supervision of ASHAs for assessment of newborns (0–2 months)
- Ensure supervision by block-level officers Medical Officer In-charges (MOICs)/Health Education Officers (HEOs)/health supervisors
- Documentation of activities and validation of data

Table 4: CCSP Skill of ASHAs of New Blocks in Phase II

Area of Assessment	ASHAs performing correctly during 1 st supervisory visit, July–September 2010 (N = 776)		ASHAs performing correctly during 4 th supervisory visit, July–September 2011 (N = 750)	
	No.	%	No.	%
Assessment of PSBI	276	36	597	80
History of convulsion in proper language	42	06	493	66
Counting of respiratory rate	91	12	542	72
Looking for chest in-drawing	175	22	555	74
Looking for nasal flaring	176	23	558	74
Listening for grunting	98	13	547	73
Asking and feeling for fever	166	21	560	75
Looking for lethargy or unconsciousness	127	16	571	76
Looking for skin pustules or boil	132	17	581	77
Looking at umbilicus for redness or pus	188	24	565	75
Asking for diarrhoea	251	32	591	79
Assessing BF (attachment and suckling)	313	40	583	78
Asking for immunisation history	65	8	539	72
Asking for other problems	28	4	419	56
Use of chart booklet for classification	01	1	480	64
Treatment according to classification	0	0	518	69
Counsel on homecare	36	5	578	77
Performing home visit	62	8	630	84
Performing home visit on time, i.e. 1, 3 and 7 days	23	3	510	68
Maintaining records according to IMNCI protocol	52	7	664	89

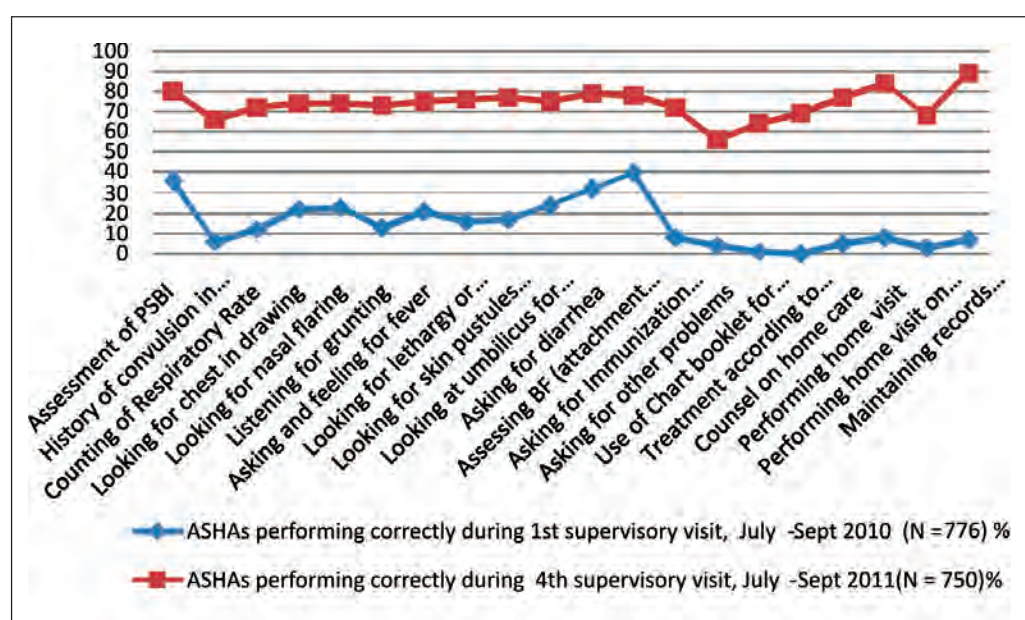


Figure 4: CCSP Skill of ASHAs of New Blocks in Phase-II

Strategies

To achieve the above-mentioned objectives, the following strategies will be adopted:

- Supportive supervision to ANMs for bridging the gap between them and ASHAs and supporting them to achieve a level of supervising ASHAs on their own
- Supportive supervision to ASHAs along with facilitation of support from ANMs/LHVs
- Facilitate supervision by block-level officers – MOICs/HEOs/health supervisors through regular feedback and liaison
- Provide an opportunity for problem-solving and quality assurance for IMNCI-trained ANMs, LHVs and MOs
- Support to complete maintenance of the Village Health Index Register (VHIR) by ASHAs for tracking each newborn in the catchment area
- Strengthening counselling skills to tackle traditional

practices through group meetings of adolescent girls and lactating mothers

Expected outputs (measurable and specific results) – by December 2012

- Supportive supervision of all CCSP-trained ASHAs and ANMs/LHVs of Aligarh district through minimum four visits
- Increased number of appropriate home visits by ASHAs (as measured by skills assessment tools)
- Increased number of appropriate supervisory visits by government supervisors – ANMs/LHVs and MOs for performing supportive supervision for CCSP
- Increased level of performance of ASHAs in areas of mother and child health and nutrition

RESULTS OF CURRENT/ON-GOING PHASE

Table 5 and Figure 5 show ASHAs performance with twenty indicators.

Table 5: CCSP Skill of ASHAs

Area of assessment	ASHAs performing correctly during 1 st supervisory visit, October–December 2011 (N = 1629)		ASHAs performing correctly during 3 rd supervisory visit, April–June 2012 (N = 1613)	
	No.	%	No.	%
Assessment of PSBI	1370	84	1371	85
History of convulsion in proper language	1240	76	1275	79
Counting of respiratory rate	1279	79	1306	81
Looking for chest in-drawing	1307	80	1319	82
Looking for nasal flaring	1304	80	1304	81
Listening for grunting	1289	79	1302	81
Asking and feeling for fever	1286	79	1283	80
Looking for lethargy or unconsciousness	1285	79	1297	80
Looking for skin pustules or boil	1301	80	1295	80
Looking at umbilicus for redness or pus	1298	80	1306	81
Asking for diarrhoea	1370	84	1354	84
Assessing BF (attachment and suckling)	1355	83	1346	83
Asking for immunisation history	1282	79	1300	81
Asking for other problems	1083	66	1179	73
Use of chart booklet for classification	1169	72	1254	78
Treatment according to classification	1210	74	1213	75
Counsel on homecare	1271	78	1240	78
Performing home visit	1379	85	1385	86
Performing home visit on time, i.e. 1, 3 and 7 days	1194	73	1198	74
Maintaining records according to IMNCI protocol	1313	81	1323	82

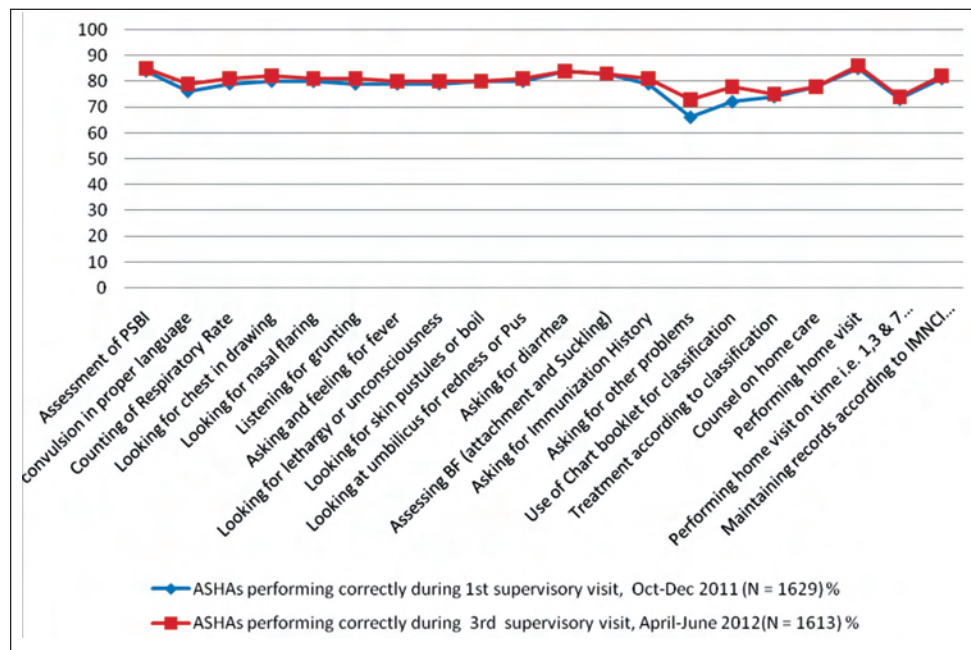


Figure 5: CCSP Skill of ASHAs in Ongoing Phase

It is evident from Table 5 that most of the indicators show sustainable performance of ASHAs for most of the indicators.

SUPERVISORY SKILL OF ANMS IN ONGOING PHASE

Ongoing Phase of the project, as the theme suggests, aims at strengthening the child survival efforts through supportive supervision activities. This objective of the project could be achieved only by activating the existing supervisory cadre – i.e., ANMs/LHVs – within the government system. ASHAs working in their areas are supervised by ANMs and there is a need for strong coordination between ANMs and ASHAs for success of any programme, especially in the context of reducing IMR/MMR. According to the objectives of the project and for sustainability of the project results achieved, during the last two phases, support to ANMs for adopting their role as supervisor of ASHAs as per CCSP norms was initiated. A total of 224 and 220 ANMs from all 12 blocks supported in supervising ASHAs during January–March 2012 and April–June 2012, respectively. The

results through supporting ANMs in supervising ASHAs as per the CCSP protocol are shown in Table 6 and Figure 6.

It was observed that most of the indicators improved during the study period for supervisory skills of ANMs. This is a positive indication as their performance and skills will undoubtedly help achieve the objective of reduction in IMR.

CONCLUSION

In most high-mortality settings, ensuring children's right to survival indicates providing case management services at the community level as well as focusing on prevention. Child survival efforts must begin with local efforts at the community level. CCSP/IMNCI guidelines for the case management of ill children, supported by high-quality training and sustained supportive supervision, are the gold standard and should continue to be implemented widely. The Aligarh Model is worthy in its efforts to actualise the vision of a world fit for children through community-based intervention and support.

Table 6: Supervisory Skill of ANMs in Ongoing Phase

Area of assessment	ANMs able to supervise correctly during 1 st supervisory visit, January–March 2012 (N = 224)		ANMs able to supervise correctly during 4 th supervisory visit, July–September 2012 (N = 216)	
	No.	%	No.	%
Assessment of PSBI	70	31.25	108	50.00
History of convulsion in proper language	50	22.32	87	40.28
Counting of respiratory rate	57	25.45	90	41.67
Looking for chest in-drawing	57	25.45	95	43.98
Looking for nasal flaring	55	24.55	95	43.98
Listening for grunting	57	25.45	91	42.13
Asking and feeling for fever	61	27.23	93	43.06
Looking for lethargy or unconsciousness	46	20.54	91	42.13
Looking for skin pustules or boil	50	22.32	88	40.74
Looking at umbilicus for redness or pus	55	24.55	95	43.98
Asking for diarrhoea	67	29.91	112	51.85
Assessing BF (attachment and suckling)	67	29.91	114	52.78
Asking for immunisation history	69	30.80	112	51.85
Asking for other problems	40	17.86	99	45.83
Use of chart booklet for classification	49	21.88	100	46.30
Treatment according to classification	57	25.45	104	48.15
Counsel on home care	42	18.75	86	39.81
Explaining signs for return	47	20.98	93	43.06
Counsel for danger signs	32	14.29	81	37.50
Advice on breastfeeding	52	23.21	97	44.91

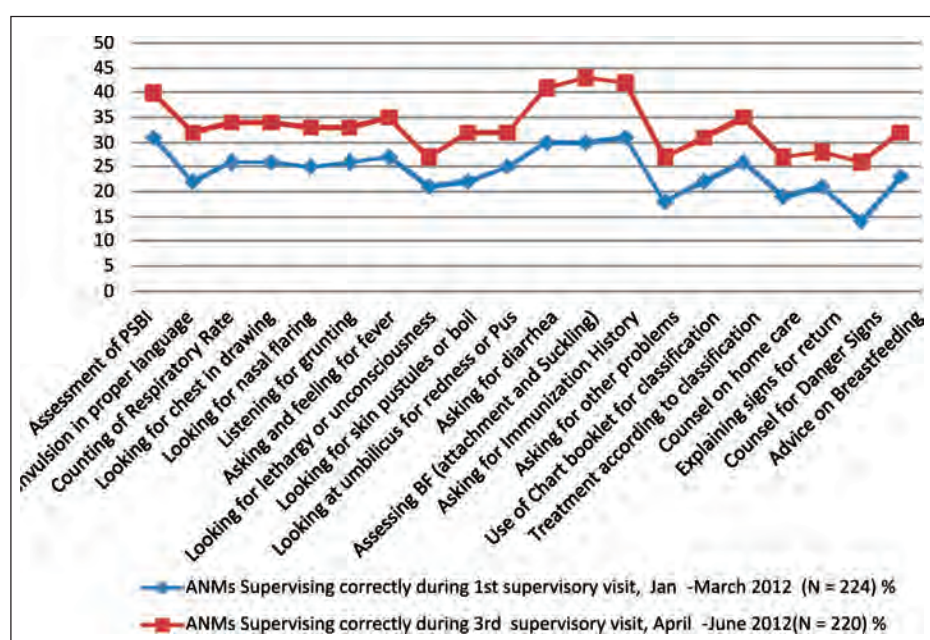


Figure 6: Supervisory Skill of ANMs in Ongoing Phase

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