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Research Article

SUPPORTIVE SUPERVISION-A UNIQUE INITIATIVE FOR IMPROVEMENT OF MATERNAL & CHILD HEALTH CARE SERVICES IN HARYANA

Arora V.[1], *Grover K.[1], Khanna P.[1] and Gupta R.[2]
[1]*Department of Community Medicine, Pt. B.D. Sharma PGIMS Rohtak, Haryana*
[2]*IAS, Addl. Principal Secretary to Chief Minister, Haryana*
Author for Correspondence

ABSTRACT
Various studies in different parts of the state found out eye opening facts relating to poor quality services and lack of attendance of health workers at various levels of health institutions. Following this, a unique concept of Supportive Supervision was introduced to revitalize the existing system. Supportive supervision is a process by which an individual or group of individuals, oversee the work of others and establish such controls and procedures that will improve the work through development of worker or group, or through manipulation of working conditions under which work takes place. Stratified random sampling was used. Every district was stratified in blocks & subcentres were selected randomly from each block. On average, 7-10 Subcentres were selected per district for each round. Faculty/Residents of medical college & NRHM officials visit the allotted district for 4-6 days, supervise the allocated public health institutions with the help of checklist & assist in problem solving along with the skill development of the health staff. District wise progress is evaluated on a composite indicator scale of 100 devised by giving weight age to infrastructure, drugs & logistics availability, knowledge. Overall state performance rose to 56 points during 2nd visit, in comparison to baseline data of 35 points on 1st visit (59% improvement) based on composite indicator scale and on 3rd visit it rose to 74 points in comparison to 56 points in 2nd round (33% improvement**).** Overall, improvement of Haryana state in 3 rounds has been 121%. Regarding skillset of the ANMs, marked improvement was seen in skills of ANMs regarding Urine examination (75%) & Hb estimation (16.7%). However, Blood pressure measurement skills showed minor improvement (1.3%) The results clearly show the impact of supportive supervision is not limited to the logistics & record maintenance. The skills & attitudinal behaviour of the peripheral staff has also improved. The Supportive supervision is a continuous process & with incorporation of MOs/SMOs, the concept is now internalized & imbibed by the health system. Supportive Supervision activity has now become an integral part of routine activities in the health system in Haryana. Moreover, it gives opportunity for self appraisal & motivation to the staff performing in the periphery.

Keywords: *Supportive Supervision, ANM, Maternal Health, Child Health, Subcenter*

INTRODUCTION
Despite the favourable conditions: GDP per capita among highest in country (Economic Survey of Haryana, 2012-2013), geographically well connected, easy access to rural areas, enhanced investment in health sector & political will, Haryana is having poor maternal and child health indicators.
Since, the inception of National Rural Health Mission (NRHM) in 2005, the institutional deliveries in Haryana are on substantially rise, but Infant Mortality Rate has declined slowly from 65 to 36 per 1000 live births in last decade (SRS Bulletin 2002 and 2015), more surprisingly Early Neonatal Mortality Rate which accounts for the major bulk of Under 5 Mortality is almost static i.e. 25/1000 live births (SRS Under 5 mortality 2010) in the last decade.
Moreover, Haryana is the only State in India with dubious distinction of rise in Maternal Deaths in last 2 decades i.e.-12.5% Decline (Reddy *et al.*, 2012).
The question arises that despite increase in institutional deliveries the maternal & child indicators are still at a standstill point. Various analysis (SWOT), research projects, studies in different parts of the state found out eye opening facts relating to poor utilization of services, attitudinal and motivational issues,

poor quality services, lack of attendance of health workers at various levels of health institutions and poor supervision and monitoring leading to a depressing environment.

The provision of high quality health services depends upon the presence and performance of skilled personnel and fully equipped health institutions. So, the current need of the hour is regular monitoring and supervision in order to achieve this holistic goal.

Following this, a unique concept of Supportive Supervision was introduced to revitalize the existing system. Supportive supervision is a process by which an individual or group of individuals, oversee the work of others and establish such controls and procedures that will improve the work through development of worker or group, or through manipulation of working conditions under which work takes place.

The main objective of supportive supervision is to find out the lacunas in the existing health care system and rectify them with support as pillars of strength. The supervisor provides reassurance, encouragement, recognition for achievement, expressions of confidence, stress and tension management strategies for the individual and unit as a whole.

In collaboration with Department of Community Medicine, PGIMS, Rohtak and NRHM officials Supportive Supervision was initiated as a new ray of hope to improve health conditions in the state of Haryana.

MATERIALS AND METHODS

Methodology

Why Supportive Supervision?

On initial assessment, it was evident that there are numerous issues at all primary, secondary & tertiary levels of public health care delivery, however, following lacunae were apparent at periphery:

- Insufficient knowledge and skills among health workers
- Insufficient on-the-job supervision and monitoring
- Insufficient logistics and supplies

Support to the health staff is rare at the periphery level - failure of 'inspection' or supervision resulted in increasing interest in 'support' focusing on the system and not the people following the management rule "You manage what you measure". The initiative was further supported by experience in other settings (e.g. Uganda-USAID[6], Andhra Pradesh Immunization model 2001-06[7]).

Key Strategies

Collaboration with Government Medical College

The process initiated in collaboration with Government medical college PGIMS, Rohtak & NRHM in May 2012 and continued till June 2016. All 21 districts are covered with both internal & external Supportive supervision. Orientation workshops were conducted to train & sensitize the Supervisors.

Tool for assessment

A pre designed, pre-tested, semi-structured tool (Checklist) was devised to collect baseline information, manpower & logistic requirements, skills assessment, operational issues, findings based on observations and a compliance report timeline is noted as per the district officials.

Process highlights

Stratified random sampling was used for selection of the Subcentres in a district. Every district was stratified in blocks & subcentres were selected randomly from each block. On average, 7-10 Subcentres were selected per district for each round. Faculty/Residents of medical college & NRHM officials visit the allotted district for 4-6 days, supervise the allocated public health institutions with the help of checklist & assist in problem solving along with the skill development of the health staff for improvement in the service delivery. Meeting with the district health officials is fixed on the last day of visit. A compliance/visit register is maintained at all the facilities visited by supervisors. On subsequent visit it is observed whether the issues registered in the registers are addressed.

External Supportive Supervision is done by Faculty/Residents of medical college & NRHM officials as per planned rosters.

On the same path, Internal Supportive supervision has been initiated to be conducted by MOs, SMOs, and Deputy CMO of the same district on weekly / monthly basis.

Data Capture & Analysis

A web portal is made on the official NRHM website. After visits, supervisors enter their preformatted checklist for respective level of institution in the portal. This helps in rapid tabulation of data on quantity, quality and performance.

The supervisory team's data provide a clear picture of how each centre is faring. District wise detailed presentations are available on the website.

Data thus collected is analysed with appropriate statistical tools (SPSS, Epi-info) & performance is assessed using qualitative & quantitative parameters.

Performance Indicator

District wise progress is evaluated on a composite indicator scale of 100 devised by giving weight age to infrastructure, drugs & logistics availability, knowledge & process indicators recorded in the checklist.

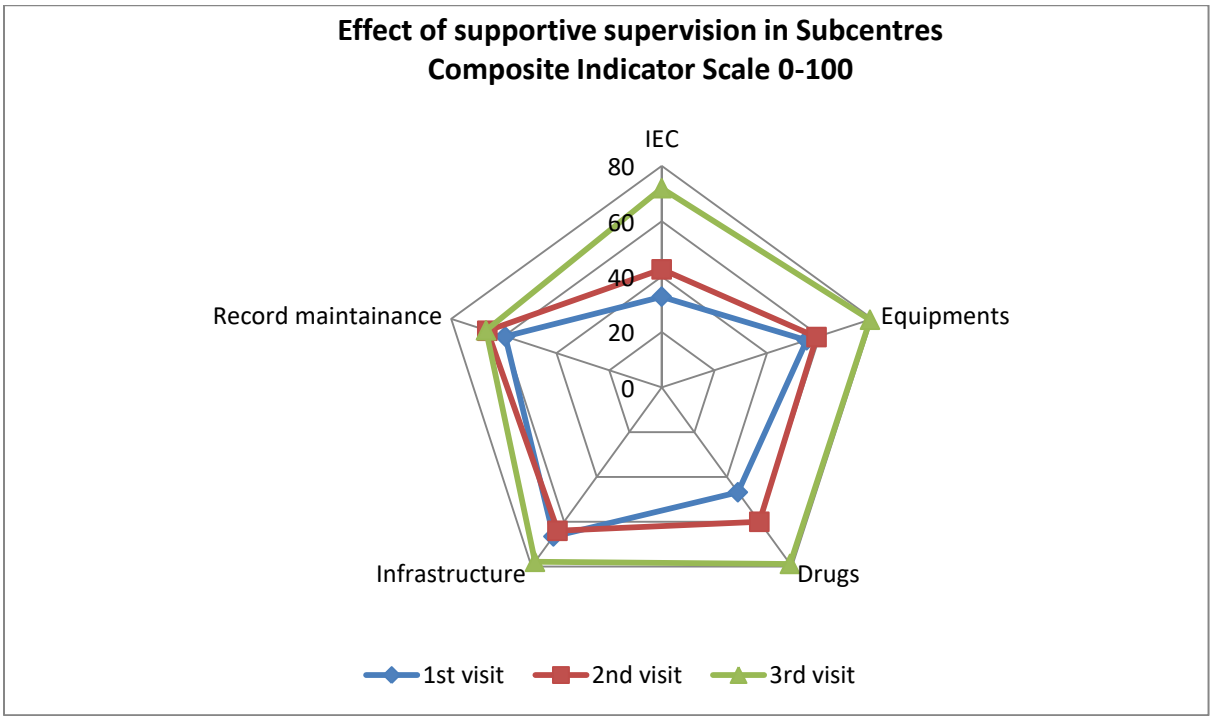
Progress report

Monthly meeting is done at the state HQ and the progress report is shared among district heads & associated stakeholders. It helps in recognizing the poor performing districts for targeted interventions & understanding the state wise maternal & child health delivery pattern.

RESULTS AND DISCUSSION

Results

1st visit data revealed there were shortage of drugs, equipments & infrastructure at most of subcentres. More disturbing picture was that few of the equipments & drugs were never used or expired. Huge gaps were observed in the knowledge & practices of the ANMs. Efforts were made to address all the issues & were brought to lime light in district & state level meetings. 2nd visit data showed improvement in the IEC, drugs availability & record keeping & the results were statistical significant. 3rd visit data analysis revealed huge improvement in domain of IEC, drugs & equipments availability. The results were statistically significant.



Graph 1: Composite Indicator Scale Improvement due to Supportive Supervision

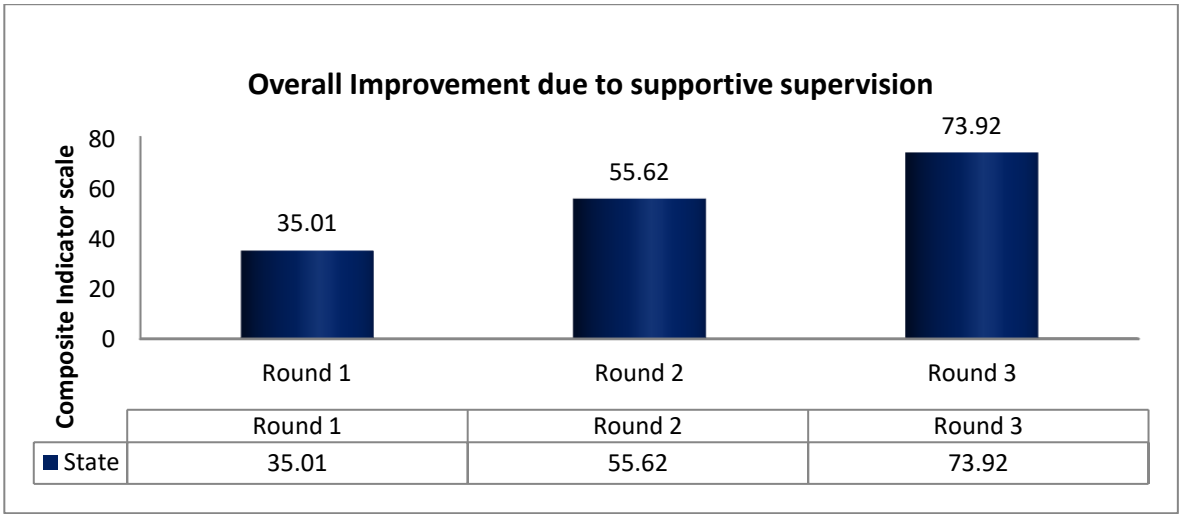
Table 1: Impact during 3 Rounds of Supportive Supervision in Haryana

		% Scoring			% Changes		
S. No.	**Variables**	**Round 1**	**Round 2**	**Round 3**	**Round 1 to 2**	**Round 2 to 3**	**Round 1 to 3**
1.	IEC activity	32.79	42.63	71.96	30.01*	68.80*	119.46*
2.	Equipments availability	55.08	58.82	79.10	6.79	34.48*	43.61*
3.	Drugs availability	46.81	60.01	78.81	28.20*	31.33	68.36*
4.	Infrastructure	66.55	64.03	77.87	-3.79	21.61*	17.01*
5.	Record keeping	59.45	66.22	66.73	11.39*	0.77	12.25
6.	Overall impact	35.01	55.62	73.92	61.90	41.60	121.27

*Statistically significant

After 3rd visit of supportive supervision maximum impact of supportive supervision was seen for IEC availability followed by drug availability. Least impact was on the record keeping i.e. 12.25%

Graph 2 shows marked improvement during 2nd visit, on composite indicator scale, overall state performance rose to 56 points in comparison to baseline data of 35 points on 1st visit (59% improvement). On 3rd visit improvement was seen in 19 out of 21 districts with overall composite indicator scale rising to 74 points in comparison to 56 points in 2nd round (33% improvement**).**

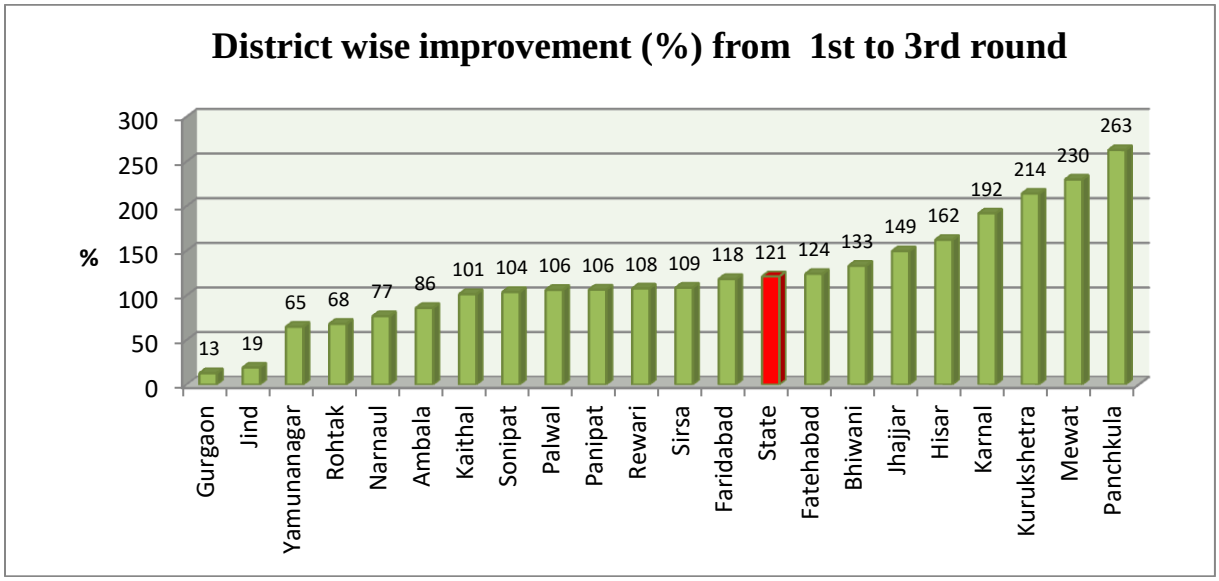


Graph 2: Overall Improvement (%) from 1st to 3rd Round

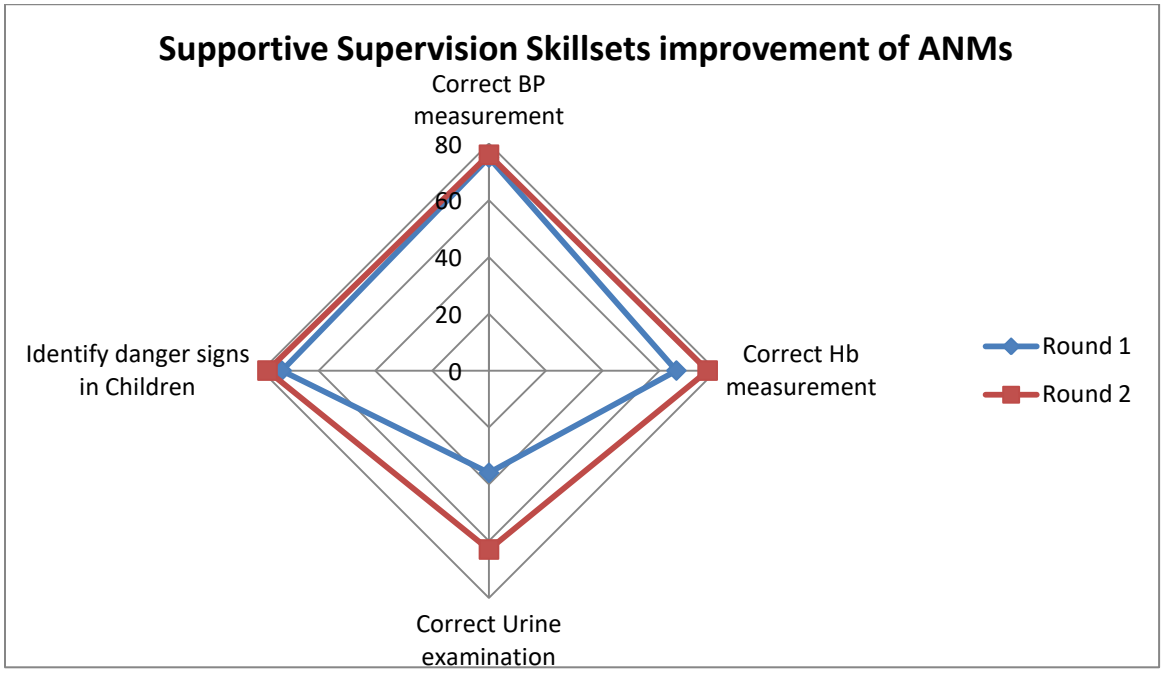
Table 2: Skillset of ANM

Activity by ANM (%)	**Round 1**	**Round 2**	**% Change between Rounds**	**P Value**
Correct BP measurement	75	76	1.33	0.869
Correct Hb measurement	66	77	16.67	0.085
Correct Urine examination	36	63	75	0.000*
Identify danger signs in Children	73	78	6.85	0.411

District wise improvement (graph 3) shows that maximum improvement of 263% was seen in Panchkula district while improvement in District Gurugram was least i.e. only 13%. Overall, improvement of Haryana state in 3 rounds has been 121%.



Graph 3: District wise Progress during 3 Rounds of Supportive Supervision in Haryana



Graph 4: Skill sets Improvement of ANMs

Regarding skillset of the ANMs (table 2 and graph 4), baseline data of 1st visit revealed that only 3/4th of ANMs were able to correctly measure blood pressure. Correct Hb estimation was performed by 66 % of the ANMs & correct urine examination for albumin/sugar was done by only 36% of the ANMs. On 2nd visit, marked improvement was seen in skills of ANMs regarding Urine examination (75%) & Hb estimation (16.7%). However, Blood pressure measurement skills showed minor improvement (1.3%).
Qualitative behaviour & skills improvement was observed in ANMs after supportive supervision activity. At the time of baseline visit, the staff was in denial mode & not confident in basic skills performance but subsequent visits revealed visible changes in attitude & activities execution. The record keeping, high risk detection, ANC check up, abdominal examination & health education skills showed remarkable improvement.

Discussion and Conclusion

The results clearly show the impact of supportive supervision is not limited to the logistics & record maintenance. The skills & attitudinal of the peripheral staff has also improved. The impact of this initiative on the health care delivery pattern is assessed with the help of concurrent evaluation on the parallel path. The Supportive supervision is a continuous process & with incorporation of MOs/SMOs, the concept is now internalized & imbibed by the health system. Supportive Supervision activity has now become an integral part of routine activities in the health system in Haryana. Moreover, it gives opportunity for self appraisal & motivation to the staff performing in the periphery.

The Project's systematic data collection and regular supportive supervisory visits can be easily transferred to other health setups in the country. The templates and data collection tools are also simple to adapt to other programs. Furthermore, since the technology is easy to use and limited training is required, the initiative can be easily replicated. Supportive Supervision is one such initiative that addresses all such issues along with appraisal of good/ innovative practices which boosts the morale of the health staff for further improvement.

ACKNOWLEDGEMENT

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