Summer Training at
National Rural Health Mission (NRHM),
Haryana
(April 9, 2012–June 1, 2012)

Impact Assessment of S.B.A Training on ANM's and Staff Nurses of Panchkula and Narnaul Districts of Haryana

By
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Under the guidance of
Dr. Kapil Garg

Post Graduate Diploma in Hospital and Health Management
2011-2013

Institute of Health Management Research,
Jaipur
2012

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CERTIFICATE

This is to certify that Mr. Saurav Aneja has undergone summer training in NRHM, Haryana from 9th April to 1st June, 2012

The candidate carried out all the studies related to summer training himself. His approach to the studies has been sincere, scientific, and analytical. This summer training in partial fulfillment of the course requirement is recommended for the award of Post Graduate Diploma in Hospital & Health Management.

I wish him success in all future endeavors.

Dr .P. R.Sodani
(Dean Academics and Student Affairs)

Dr. Kapil Garg
(Associate Professor)

TO WHOM IT MAY CONCERN

This is to certify that Mr. Saurav Aneja did his summer training under State Institute of Health & Family Welfare, Haryana on the topic **"Impact assessment of SBA training on ANMs and Staff Nurses of Panchkula and Narnaul District of Haryana"** from 9th April, 2012 to 31st May, 2012 under my guidance.

His approach has been sincere, scientific and analytical towards the study. I wish him good luck in all future endeavours.

Dated: 22nd June 2012

Principal SIHFW
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I am particularly thankful to **Dr. Puneet Gupta**, training consultant (SIHFW, Haryana), who monitored and evaluated our project and supported the project in all respects. I am most grateful to **Dr. Kashmere** and **Dr. Kamna Goyal** (SIHFW Haryana).

Needless to mention that my mentor **Dr. Kapil Garg** was always supportive to me and gave his valuable feedbacks if and when required, for providing valuable inputs on the findings, which helped me to improve the interpretation and presentation.

My special thanks to **Dr. P.R. Sodani** and **Dr. Shilpi Mishra Sharma** as not only they have shown great interest but also guided me accordingly and gave valuable inputs to enrich my study. I thank you sir and ma'am.

Finally, I want to thank the support staff (drivers, technicians, workers) and logistics supervisors who undertook a very challenging assignment. I must also acknowledge the contribution of all of the staff nurses and ANMs (interviewees) who willingly participated in the study. I hope that their time and effort will result in improvements in the training implementation.

Saurav Aneja

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ABBREVIATIONS

PGDHM	Post Graduate Diploma in Health and Hospital Management
IIHMR	Institute of Health Management Research
AICTE	All India Council Technical Education
NRHM	National Rural Health Mission
IMR	Infant Mortality Rate
MMR	Maternal Mortality Ratio
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha, Homeopathy
SIHFW	State Institute of Health and Family Welfare
SBA	Skilled Birth Attendant
ANM	Auxiliary Nurse Midwife
MO	Medical Officer
LHV	Lady Health Visitor
PHC	Primary Health Centre
ASHA	Accredited Social Health Activist
SC	Sub Centre
IMNCI	Integrated Management of Neonatal and Childhood Illness
HMIS	Health Management Information System
NGO	Non Governmental Organization
HUDA	Haryana Urban Development Authority
MOHFW	Ministry of Health and Family Welfare
EMOC	Emergency Medical Obstetric Care
RTI	Reproductive Tract Infection
STI	Sexually Transmitted Infection
IV	Intravenous
AMTSL	Active Management of Third Stage of Labor
IFA	Iron Folic Acid
Hb	Hemoglobin
IPHS	Indian Public Health Standards
ANC	Ante Natal Care
PNC	Post Natal Care
WHO	World Health Organization
PPH	Post Partum Hemorrhage
EOC	Emergency Obstetric Care
LRP	Learning Resource Package
MDG	Millennium Development Goals
AWW	Anganwadi Worker
NFHS	National Family Health Survey

Introduction

The Post Graduate Diploma in Hospital and Health Management (PGDHM) at the Institute of Health Management Research (IIHMR), Jaipur, is a two-year full time programme approved by All India Council of Technical Education (AICTE), Government of India. After the first year we are required to do our summer training for a period of eight-week in a health care organization. This summer training is an integral part of the course and is aimed to provide a better understanding of the health system in our country. I did my summer internship from 'NRHM Haryana' from 9th April 2012 – 1st June 2012.

About The Organization

National Rural Health Mission (NRHM) Haryana has been launched with a view to bringing about dramatic improvement in health system and health status of people, especially those who live in rural areas of the country. The mission seeks to provide universal access to equitable, affordable and quality health care which is accountable and at the same time responsive to the needs of people, reduction in child and maternal deaths as well as population stabilization and gender and demographic balance. Key features in order to achieve the goals of the Mission include making the public health delivery system fully functional and accountable to the community, human resource management, community involvement, decentralization, rigorous monitoring and evaluation against standards, convergence of health and related programs from village level upwards, innovations and flexible financing and also interventions for improving health indicators.

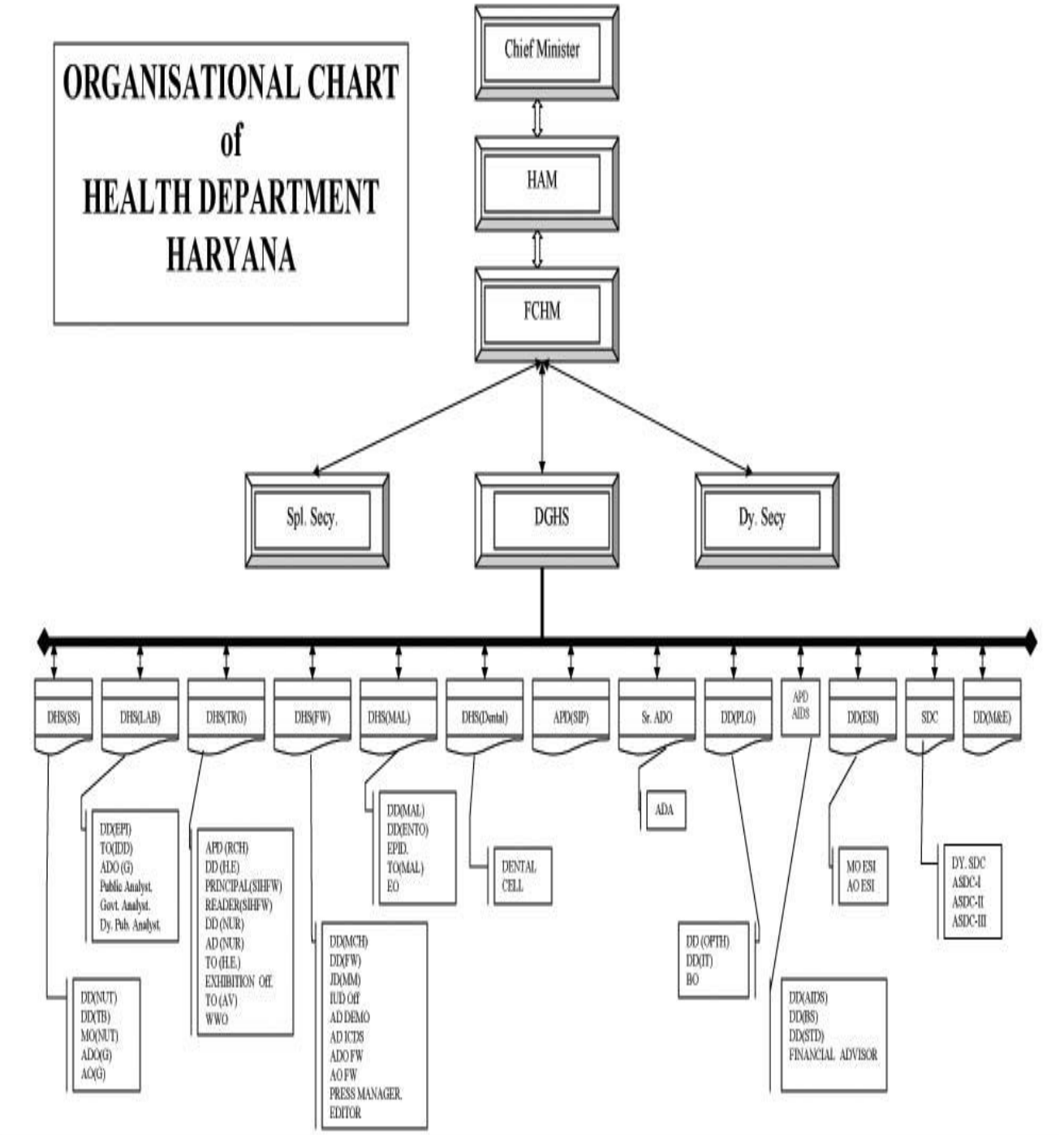
GOALS

- Reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR)
- Universal access to public health services such as Women's health, child health, water, sanitation & hygiene, immunization, and Nutrition.
- Prevention and control of communicable and non-communicable diseases, including locally endemic diseases
- Access to integrated comprehensive primary healthcare
- Population stabilization, gender and demographic balance.
- Revitalize local health traditions and mainstream AYUSH
- Promotion of healthy life styles.

SIHFW, Haryana

State Institute of Health and Family Welfare (SIHFW), Haryana was established in 1992 and is the apex training institute of Department of Health & Family Welfare, Haryana. Since its inception SIHFW has been envisaged as state level institution for improving the effectiveness of health care delivery system by imparting knowledge and skill based training to the medical and Para-medical health personnel at different levels. Specially, SIHFW is responsible for imparting trainings to identified medical professionals in accordance with the approved training as per the guidelines provided by GoI for individual trainings plans apart from coordinating and supervising the activities of other state training centers.

Organizational management of Health department (NRHM, Haryana)



D.G.H.S.-Director General, Health Services; DHS- Director, Health Services; DD- Deputy Director; APD- Additional Project Director; Sr. ADO- Senior Administrative Officer; SDC-State Drug Controller; ASDC-Assistant State Drug Controller ; TO- Technical Officer, MO-Medical Officer, AO- Accounts Officer, AD- Assistant Director, JD- Joint Director, ADA- Assistant District Attorney; EO- Establishment Officer; BO- Budget Officer; EPID- Epidemiologist.

Various programmes running under NRHM, Haryana-

a) ADOLESCENT HEALTH
ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH (ARSH)

Progress so far

The AFHS was being run in 8 districts of the State in 2008-09 i.e. Yamuna Nagar, Kurukshetra, Rohtak, Bhiwani, Rewari, Gurgaon, Sonepat, and Jind. In each district, the AFHS Programme was implemented in each District hospital, 2 CHCs, 4 PHCs and 100 villages being covered under these institutions. It was extended to 9thdistrict Panchkula and all PHC/CHCs and 125 villages in these districts in 2009-10.

In 2008-09, Counselors had been recruited under the supervision of MNGOs for providing adolescent friendly health services. This exercise did not bring the desired results. In 2009-10 the counselors under the AIDS Control Programme were given training and this workforce is being used for counseling of adolescents under the ARSH Programme.

2 peer educators per village (one male and one female) were identified and paid incentives to hold meetings of adolescent groups.

Present Scenario

Name of District	Villages	Institutions Covered
Y. Nagar	125	2 CHC, 4 PHC
Kurukshetra	125	3 CHC, 5 PHC
Rohtak	125	2 CHC, 4 PHC
Bhiwani	125	2 CHC, 4 PHC
Rewari	125	2 CHC, 4 PHC
Gurgaon	125	2 CHC, 4PHC
Sonepat	125	2 CHC, 4PHC
Jind	125	2 CHC, 4PHC
Panchkula	125	CHC, 4PHC

b) RCH PROGRAMME

Maternal Health

It is one of the most important components of RCH programme. Improvement of maternal health & decline of maternal mortality rate requires availability of large number of health services early in pregnancy. These include early antenatal registration, tablets of Iron Folic Acid as prophylaxis and therapy, regular antenatal check-ups, monitoring of blood pressure, Tetanus Toxoid immunization, Timely detection of high risk Antenatal cases and their timely referral, delivery in safe and hygienic environment by skilled birth attendant, timely referral in case of obstetric emergency for management of hemorrhage with blood transfusions, availability of caesarean section facility and minimum 3 post-natal visits.

Maternal mortality of Haryana as per SRS 2007 is 162 deaths per lac live births. The common causes of maternal mortality are sepsis, hemorrhage (ante-partum & post-partum), pregnancy induced hypertension, obstructed labor etc. Also countless number of women is morbid due to anemia, bad obstetrical history, pregnancy wastage, infections etc.

Multi pronged strategies have been adopted by the State to improve maternal health in terms of demand and supply, interventions coupled with enhanced skills of health personnel to provide accessible, affordable and quality health care services from grass root levels up to district/State level.

C) ASHA

The community based health linked workers, ASHAs, are the first port of call for the health related demands of vulnerable section of the population, especially women and children, in the rural areas. The importance of the ASHA programme is well understood by the State of Haryana. Accordingly, all efforts are being made by the State to train the ASHAs, especially for the RCH programmes like early registration of pregnancy, ANC coverage, Institutional Deliveries, Post Partum Care, Home Based New Born Care, Immunization, Management of Malnourished Children etc. The incentive structure has been suitably revised and many new areas of activities for ASHAs have been identified in order to make it more attractive for the ASHAs to work more and to earn more. ASHAs have also been given a distinct identity in the State through uniforms, identity cards and name plates in front of their houses. Regular mentoring of ASHAs is being ensured through ASHA sammelan and monthly meetings at the Block levels. The State proposes to give Drug Kits to another 5000 ASHAs in the year 2011-12. It shall be the endeavor of the NRHM State HQ to closely monitor the progress of ASHA programme by appraising the performance of each ASHA in the key areas of RCH programme. The system of appraisals has already been introduced and centralized database of all the ASHAs in the State has already been created. In the year 2011-12 it shall be ensured that only well performing ASHAs are allowed to continue in the system, while dormant and the non-performing ASHAs are weeded out.

D) Training

SIHFW has been envisaged as state level institution for improving the effectiveness of health care delivery system by imparting knowledge and skill based trainings to the medical and Para-medical health personnel at different levels.

SIHFW has now been established as a Society and registered with the Registrar of Societies, Panchkula on 11.11.2010 with the name of "Swasthya Prashikshan Kendra, Panchkula". SIHFW is also a Collaborating institute for UT Chandigarh and Jammu & Kashmir for which NIHFW provide the spots. The institute provides the umbrella spot 21 DTC and one RHFWTC at Rohtak. Apart from this short duration refresher course are being conducted by SIHFW for MO, Staff Nurse, ANM and ASHAs from the State Budgets.

E) IMMUNIZATION PROGRAM

Immunization programme is on the priority list of the Govt. of Haryana, as a result of which there has been a sustained improvement in the evaluated coverage report. Immunization sessions are held on every Wednesday along with outreach session on every Thursday and fixed day fixed sites (PHCs/ CHCs/ Hospitals) sessions are also been conducted to cover all eligible children. Hepatitis 'B' immunization programme has already been implemented in districts Panchkula & Ambala. Similarly, JE immunization programme has already being implemented in district Ambala, Kaithal, Karnal, Kurukshetra, Panipat, and Yamuna Nagar. The state is doing efforts to

reduce the drop-outs in order to achieve 100% immunization coverage. The IMR had declined from 73 (NFHS-I) to 42 (NFHS-III).

Considering high avoidable morbidity & mortality due to Measles, the Govt. of India has desired to organize a Measles Catch-up Campaign on recommendations of National Technical Advisory Group on Immunization (NTAGI). This campaign was organized in five districts of Haryana (Jhajjar, Mewat, Palwal, and Gurgaon & Faridabad) on the basis of low measles coverage. More than 13.0 lac children of the target age group (9 months to 10 years) were vaccinated. High quality vaccination campaign was done. No serious AEFI cases were reported. Overall performance under the immunization programme is satisfactory in Haryana and focus now is on uncovered children in the urban areas, upcoming peri-urban inhabitation/ colonies, isolated populations/ hamlets, urban slums and vacant sub-centers.

F) Integrated Disease Surveillance Programme

The integrated disease surveillance project was launched in Haryana State in the second phase in 2005 with the support of World Bank to establish decentralized State based system of surveillance. The aim was to detect early warning signals of impending outbreaks and help in initiating an effective response in a timely manner.

The Haryana state has been able to achieve, improved surveillance and strengthening of data quality, analysis, improved laboratory Support and links to action. Trained stakeholders under IDSP have been able to increase disease surveillance, coordination and rapid action in cases of outbreak.

G) School health program

Indira Bal Swasthya Yojna (IBSY)

The state had launched an integrated Scheme on 26th Jan 2010 for all children between 0-18 years with inter-sectoral convergence of Health, Sarv Shiksha Abhiyan, Women and Child Development and Social Justice & Empowerment. It covered the issues of 3D's of Nutritional Deficiency, Disability, and Disease (including Non communicable diseases). The main components of the Indira Bal Swasthya Yojna include covering school children, Anganwadi Centers and Children out of Anganwadis and School.

H**). IMNCI (Integrated Management of Neonatal and Childhood Illness)**

Under this, a book is given to ANM's for field visits for checking breastfeeding and nutritional status. It's been a symptomatic approach within 0-2 months as it's very fatal here because of severe bacterial infections then after that within 2months-5years weight according to age is taken and secondary feeding habits are observed for anemic patients.

I). **HMIS (Health management Information System)**

HMIS is also functional there since last two-three years. They have computerized offline reporting system of the data which they take from their manually maintained registers as (FBR) **online feeding system has not started till now which will probably be online by the coming months of this year** .The data that they feed on HMIS web portals is the data of their own PHC and of all the SC's that comes under them. And then they send one copy of that data to the CHC through mail or by hard copies. SC's don't have computerized feeding system; they report to the PHC where all the compilation of data occurs and then forward it to the CHC. HMIS formats have reduced their manual work load and have also reduced their errors. Trainings get organized for information assistant, ANM's, LHV's and MO's handling HMIS.

J) **MCTS (Mother child tracking system)-**Besides these programmes MCTS is also been working in Haryana, separate formats are there for MCTS like HMIS whose data entry is also done on MCTS online web portals like that of HMIS software.

Project

On

IMPACT ASSESSMENT OF S.B.A TRAINING ON ANM's AND STAFF NURSES OF PANCHKULA AND NARNAUL DISTRICTS OF HARYANA

Background

The state of Haryana has a maternal mortality ratio (153 per 100,000 live births), which is better than the national average but it is yet to achieve the MDG which is 109 by 2015. This can be attributed to, among other factors, the lack of skilled attendants at deliveries. To tackle this situation, the Government of Haryana (GoHR) has instituted training on Skilled Birth Attendants (SBA) for all auxiliary nurse midwives (ANMs) in the state in 2006.

The intervention is designed to address gaps in current SBA knowledge and practices so as to create a superior birth attendants environment and improve the utilization of health services by pregnant and recently delivered women, which will, consequently, reduce the maternal mortality ratio. This intervention includes training of all the auxiliary nurse midwives (ANMs), lady health visitors (LHVs) and staff nurses (SNs) in the state as skilled birth attendants. Other interventions to strengthen this programme include: creating facilities to support ANMs post-training, strengthening supportive supervision systems, strengthening motivation of ANMs through reward and recognition schemes, and rotational posting of ANMs at health facilities to reinforce new skills.

As a result of this package of interventions, it is anticipated that the number of deliveries attended/conducted by skilled birth attendants and their knowledge regarding maternal and neonatal health issues and the volume and efficacy of postpartum and newborn care services will increase.

Rationale for study

It is well known that observations of training participants in the artificial environment of a training site do not always match the reality of their service delivery site. For a number of reasons, there may be a gap between training and practice: knowledge is forgotten, skills lost through lack of reinforcement, the practice environment may obstruct good care, supervision is lacking or undercuts the worker, and there may be an absence of refresher training.

Anecdotal observation indicates that SBAs working in rural areas have inadequate central support and supervision. There is a shortage of reliable data concerning possible barriers for SBAs to maintain a good quality of performance in their clinical practice after completion of training. For all of the above reasons this study is necessary.

There is a shortage of reliable data concerning possible barriers for SBAs to maintain a good quality of performance in their clinical practice after the completion of the training.

Research objectives:

- To assess the knowledge, skills and current practice of SBAs after training.
- To explore the reasons for skills and knowledge weaknesses.
- To find out how much practical experience SBAs have in conducting deliveries and administering and key maternity procedures.
- To describe what affects the ability of SBAs to implement the skills learned in training.
- To utilize this information in improving the training and follow up system.

Methodology:

In Project1, I carried out a survey among 60 trained and 20 untrained ANMs and staff nurses in Narnaul and Panchkula districts to identify the gaps in their knowledge and practices, which prevent them from functioning as effective skilled birth attendants. If the objective of reducing maternal mortality is to be met, both the health functionaries as well as the health facilities have to function at a satisfactory level. In order to adopt a comprehensive approach towards improving SBA, the survey also covered health facilities, consisting of health sub-centers (HSCs), primary health centers (PHCs) and district hospitals. This report contains the findings from both the districts and the recommendations for action which emerged from them. No major variance was observed in the findings from the two districts, and hence this report presents the combined findings of both the districts.

Methods: We used a mixed method of cross sectional study design to assess the knowledge and skills of SBAs. As stated above, the study was conducted from 9th April to 30th may 2012.

Sample: We purposively sampled SBAs on the basis of their health facility, and type of health facility. Thereafter, we chose more samples from lower level of facility of SBAs that had been trained in different training sites. Our inclusion criteria were any SBA that was employed at a health facility who was in active practice as SBA. We excluded SBAs who were not in active practice. We used a mixed methods cross sectional study design to assess the knowledge and skills of SBAs, followed-up 60 SBAs, of who 60 SBAs were in clinical practice: 30 ANMs, 30 Staff Nurses, 20 untrained were also interviewed (10 from each district). They were located in 13 institutions in 2 districts (Narnaul and Panchkula) of diverse geography. Just over half of the institutions visited were sub centers.

Assessment: To describe our SBA population, we collected data on their designation, age and length of service since they received training. The FEP assessment took approximately 20 minutes for each SBA. The assessment tool was developed from the SBA Learning Resource Package (LRP). Assessment of Skilled Providers from JHPIEGO and included 3 components:

- Knowledge tests
- Skills tests

- Practical experience related to emergency obstetric care (EOC)
- Availability of logistics

We also introduced and implemented the QI tool. This tool enables each health facility to assess the quality of care provided at their health facility and make an action plan to improve their facilities. This can be used as a baseline from which facilities can assess their progress.

1 - Knowledge test

General knowledge about procedures and dealing with complications was tested using 16 multiple choice questions, which were about the use of partograph, and about PPH. One question about newborn resuscitation was not understood correctly, danger signs of pregnancy and delivery etc.

2 - Skills test

The skill test included six different domains: assisting normal birth, active management of third stage of labor, newborn care, breech delivery, vacuum extraction and manual vacuum aspiration. Participants had to perform those six skills in the assessment. Each domain had a standardized check-list comprised of 8-15 skill steps. All of the skills were assessed on anatomical models. Occasionally patient/clients were available and in these situations we observed SBA skills during this time.

Questionnaire:

The questionnaire for this research activity consisted of two main sections. The first included questions on background characteristics, training, and knowledge about maternal and newborn health. The second section focused on skill assessment regarding routine and important practical tasks, such as assessment of anemia, abdominal examination, use of clean delivery kit, hand washing, process of delivery of a newborn, cleanliness of a newborn and examination of cord and placenta.

Ethical considerations

Informed consent

Informed consent was obtained from all study participants after describing them in detail the issues related to the study. For the structured questionnaire, interviewers described the scope and purpose of the questionnaire and its approximate length, and they stressed that participation was entirely voluntary. The confidentiality of all responses was stressed.

Privacy

The structured questionnaires were conducted in private and out of the hearing of other people. For the practical observation section, adequate auditory and visual privacy was ensured.

Confidentiality

All data collected for the study were kept confidential and anonymous. The structured questionnaires were identified by personal identification codes rather than participant names. All respondents were ensured that the results will be kept confidential.

Findings

Participants

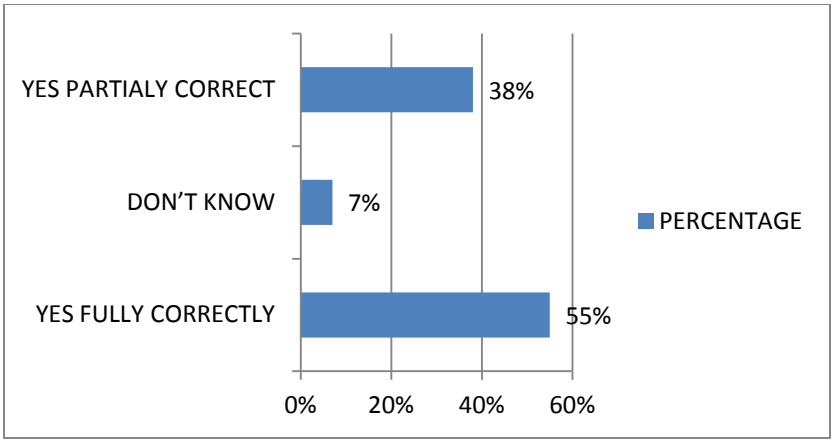
A total of 80 SBAs working in a public facility from two districts were assessed. There were 30 ANMs, 30 Staff Nurses and 20 untrained. They were trained from eight different training sites. Their post-training experience ranged from less than one year to over 3 years. Of the SBAs that were assessed, around 50% of SBAs were from S/HP, 36% from PHCs, and 8% from Hospital.

Knowledge: Maternal death

According to the World Health Organization (WHO), "A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes."

Generally, there is a distinction between a direct maternal death that is the result of a complication of the pregnancy, delivery, or management of the two, and an indirect maternal death that is a pregnancy-related death in a patient with a preexisting or newly developed health problem unrelated to pregnancy. Fatalities during but unrelated to a pregnancy are termed *accidental*, *incidental*, or non obstetrical maternal deaths.

FIGURE 1- Knowledge about Maternal Deaths



55% of midwives correctly defined maternal death.

38% of midwives partially defined maternal death correctly.

7% of midwives did not know at all.

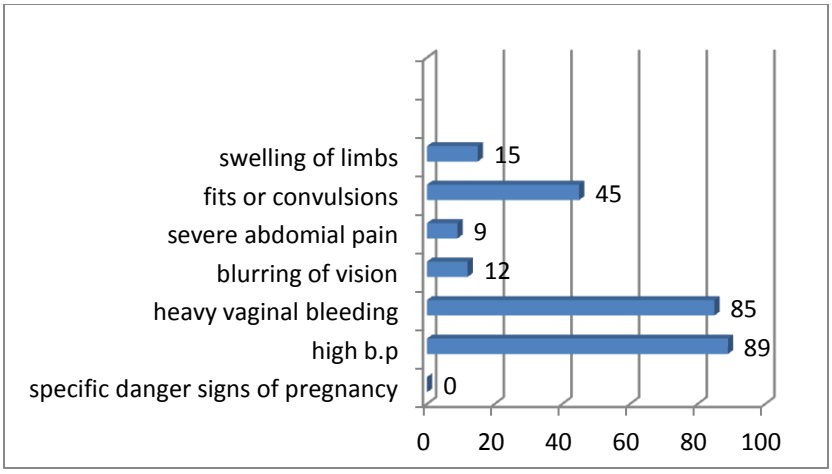
Knowledge-maternal health

The knowledge of staff nurses and ANMs was assessed on different aspects of maternal health. For assessing the knowledge of danger signs of pregnancy, delivery and postpartum period, the CMWs were first asked specific knowledge-based questions derived from their curriculum. First, spontaneous responses were received and this was followed by responses that were obtained upon prompting. The topics which were assessed for knowledge included: management of eclampsia, process of labor, obstetrical complications requiring referral, etc

Danger signs of pregnancy

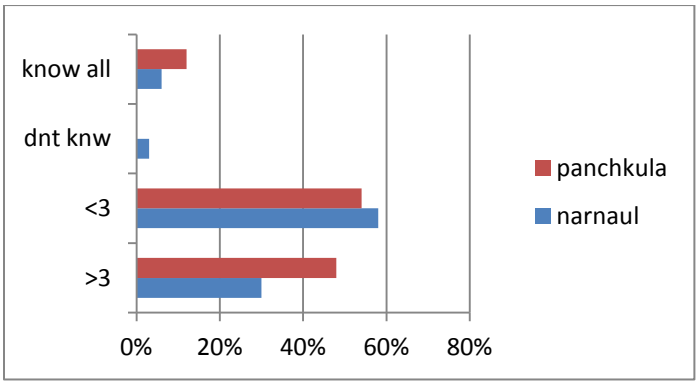
Information was collected and analyzed on the following five danger signs of pregnancy: high blood pressure, heavy vaginal bleeding, blurring of vision, severe abdominal pain, and fits or convulsions.

FIGURE 2- Knowledge about Danger Signs of Pregnancy



Graph shows that knowledge of danger signs varied across districts. Health workers from Panchkula were more aware of danger signs as compared to Narnaul. The majority of respondents mentioned heavy vaginal bleeding and high blood pressure. Knowledge regarding blurring of vision and severe abdominal pain was very limited across both districts.

FIGURE 3- Comparison of Districts about the Knowledge of Danger Signs of Pregnancy



•HEAVY VAGINAL BLEEDING
•BLURRING OF VISION
•SEVERE ABDOMINAL PAIN
•FITS OR CONVULSIONS
•HIGH BP
•SWELLING OF LIMBS

► 30 percent of midwives spontaneously knew three or more danger signs of pregnancy in the district of Narnaul whereas in Panchkula it was 48 percent.

► 3 percent of midwives did not know any danger signs of pregnancy in Narnaul whereas in Panchkula no such mid wife was found who had no knowledge about danger signs.

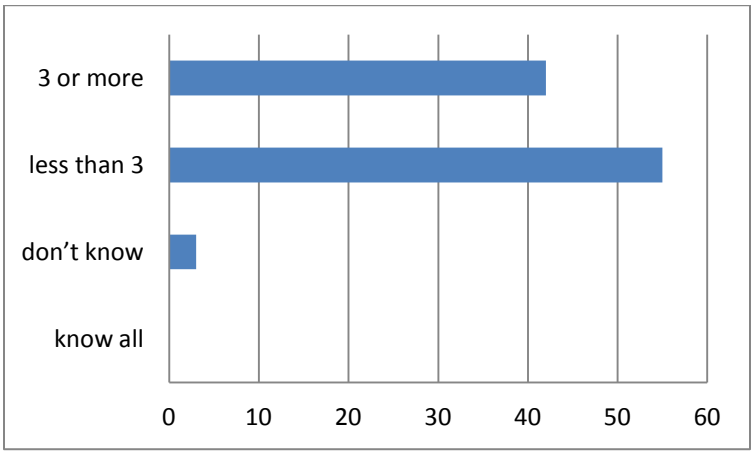
► No midwife knew all of the danger signs of pregnancy in any of the two districts.

Danger signs of delivery

Information was collected and analyzed on the following danger signs of delivery: premature rupture of membranes, prolonged labor, retained placenta, excessive vaginal bleeding and mal positioning of fetus.

Majority of respondents mentioned excessive vaginal bleeding as an important danger sign of delivery. All of the respondents from Panchkula knew about premature rupture of membrane, while in Narnaul few of the workers were aware of this. About two-thirds of the respondents in Narnaul and Panchkula were aware of prolonged labor (6/10 and 5/7 respectively). Overall the knowledge of all other danger signs was very limited.

FIGURE 4- Knowledge about Danger Signs of Delivery



- Premature rupture of membrane
- Prolonged labour
- Retained placenta
- Excessive vaginal bleeding
- Mal positioning of fetus

► 42 percent of midwives knew at least three danger signs of delivery.

► 3 percent of midwives did not know any danger signs of delivery.

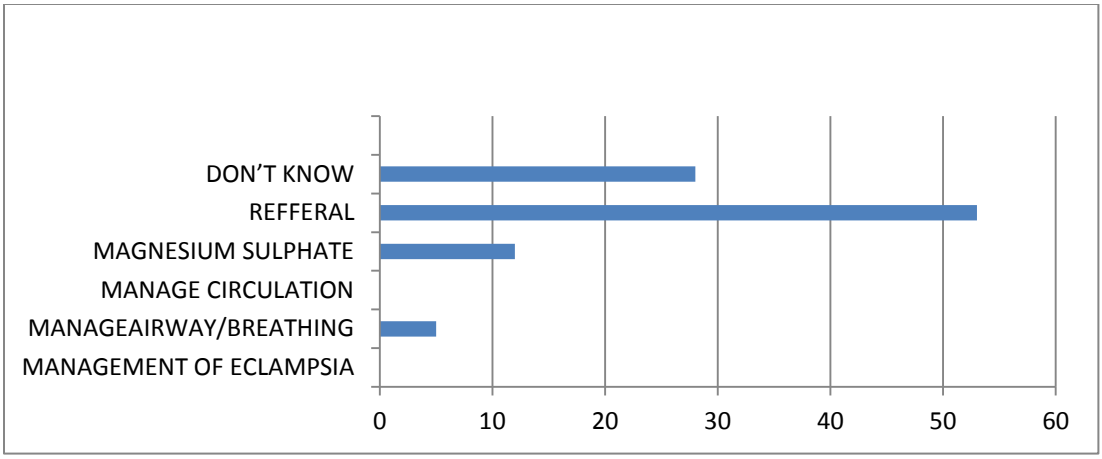
► No midwife knew all of the danger signs of delivery.

Eclampsia

Eclampsia is defined as the occurrence of convulsions not caused by any coincidental neurological disease such as epilepsy in a woman whose condition also meets the criteria for preeclampsia.

Knowledge of CMWs was assessed regarding management of eclampsia because prompt recognition and referral plays an important role in the management of the patient. It shows that a majority of respondents (50%) mentioned referring a patient to a higher-level facility in order to manage a patient with eclampsia. It is important to note that only a small number of respondents mentioned the basic management that is required to stabilize the patient prior to referral, which includes management of airway, breathing and circulation. None of the respondents mentioned management of breathing in Narnaul.

FIGURE 5- Knowledge about Management of Eclampsia



More than 50 % respondents mentioned referring a patient to a higher-level facility in order to manage a patient with eclampsia.

► 20 percent of midwives knew three steps of eclampsia management.

► 25 percent of midwives did not know any steps of eclampsia management.

► No midwives knew all steps of eclampsia management.

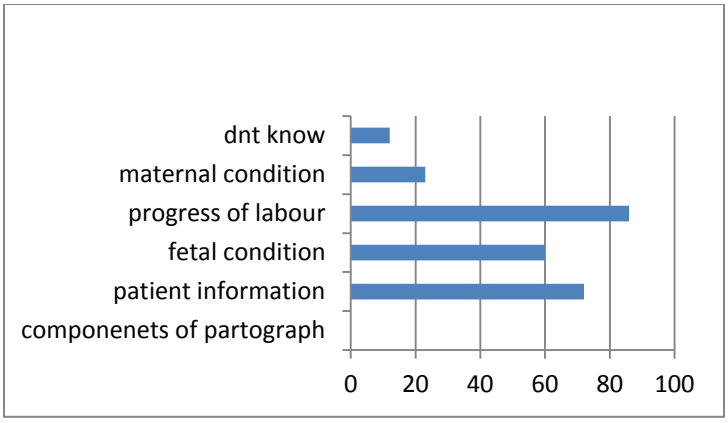
Partograph

A partograph is used for the assessment of the progress of labor. Findings are plotted on a graph commencing at the start of the active phase of labor. The graph has four basic components: 1) patient information, 2) fetal condition, 3) progress of labor, and 4) maternal condition. Midwives are supposed to have knowledge of all of these components in order to assess the progress of labor and to make timely decisions regarding referrals, if needed.

A majority of respondents mentioned the third component of a partograph (progress of labor), which is the most important component of a partograph. Component mentioned least was maternal condition.

Knowledge about the components of partograph was found to be more in district Panchkula as compared to Narnaul.

FIGURE 6- Knowledge about Partograph



► 74 percent of midwives knew at least 3 components of a partograph.

►5 percent of midwives did not know any components of a partograph.

► No midwife knew all components of a partograph.

Partograph usage

Less than 50% of respondent correctly know to plot the partograph

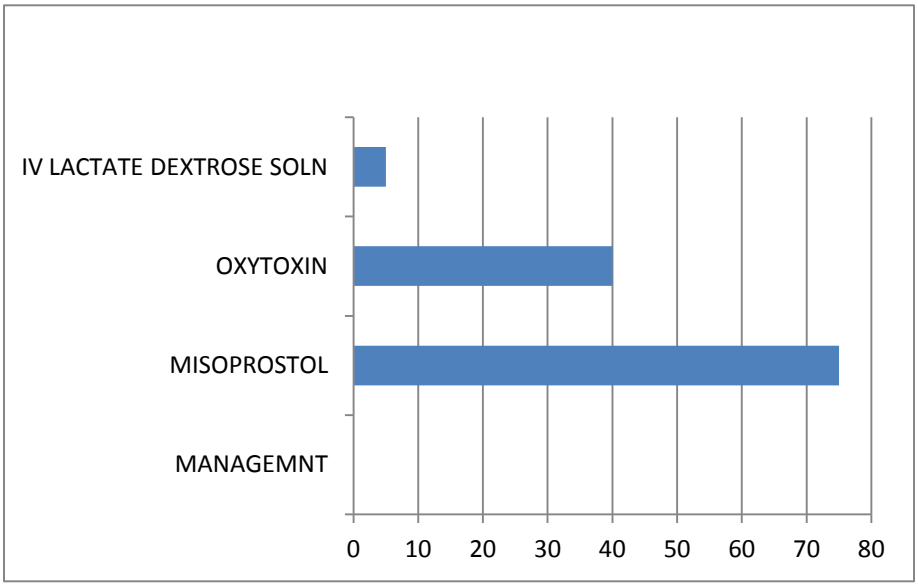
Reasons given

- No regular supply of partograph.
- Lack of realization about the importance of partograph.
- Human resource shortage in the facilities.

PPH Management

Post partum management plays a very important role in preventing maternal deaths. Therefore respondents were asked about the management of PPH. Majority of the respondents were aware of Misoprostol administration or Oxytocin. Least was aware of lactate dextrose solution.

FIGURE 7- Knowledge about PPH Management



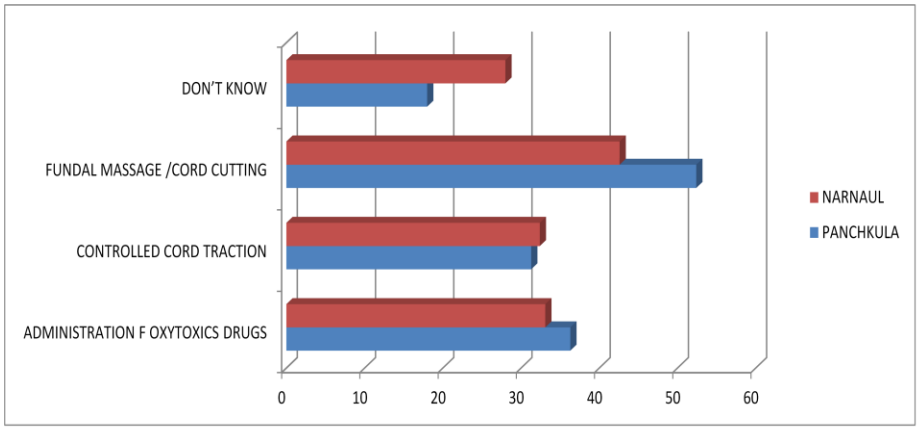
Active management of 3rd stage of labor

All midwives should be able to carry out active management of the third stage of labor (AMTSL); otherwise, grave complications can arise, such as hemorrhage and inversion of the uterus. Active management of the third stage of labor also plays a considerable role in the prevention of postpartum hemorrhage. AMTSL has three components:

- Administration of Oxytocin drug to speed effective uterine contractions and separation of placenta;
- Controlled cord traction to facilitate quick placental separation, preventing it from becoming trapped in the cervix, and
- Fundal massage/Cutting of umbilical cord.

The knowledge of the midwives was assessed on all three components.

FIGURE 8- Knowledge about Management of 3rd Stage of Labor

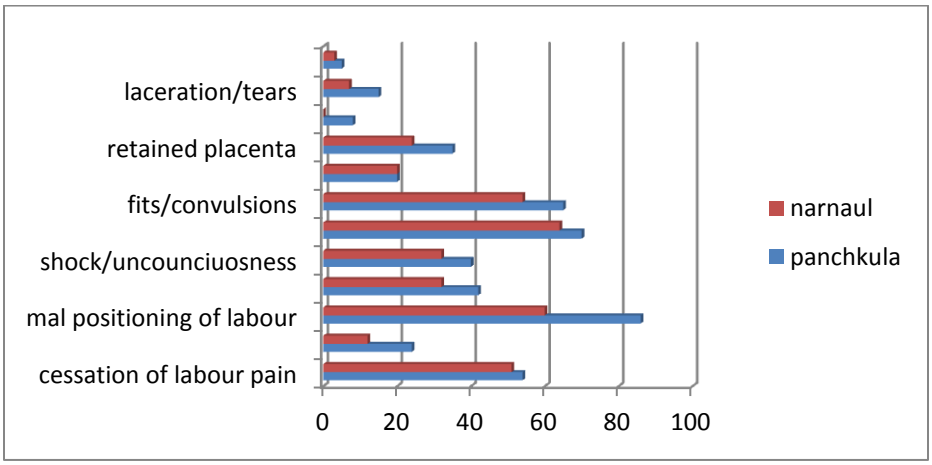


❑Only 29 per cent were aware of the active management of the third stage of labour (AMTSL).

❑ The ANMs had limited knowledge of the specific steps involved in carrying out AMTSL; just one in three knew about the use of oxytocic drugs to prevent haemorrhage, while 43 per cent were aware of fundal massage.

❑In terms of the knowledge needed to provide quality delivery care, spontaneous awareness of ANMs about delivery-related complications was mainly confined to postpartum haemorrhage and prolonged labour

FIGURE 9-Conditions requiring referrals

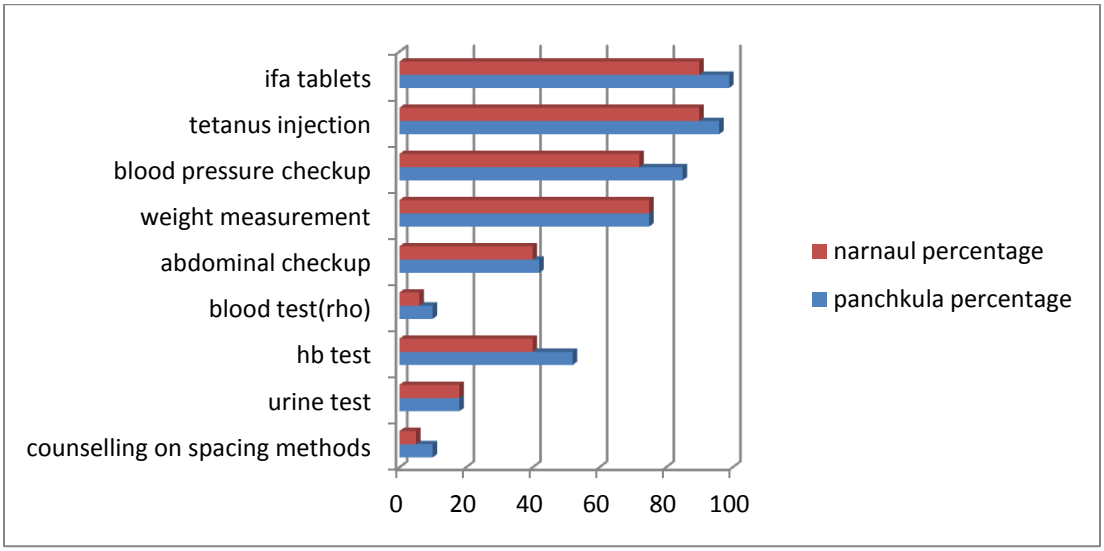


The majority of respondents mentioned fits/convulsions, followed closely by malpositioning of fetus and heavy bleeding before placenta comes out. The other most commonly mentioned by at

least half of the respondents were: heavy or constant bleeding after placenta comes out and cessation of labor pains.

All other symptoms were mentioned by less than half of the midwives.

FIGURE 10-Knowledge about Antenatal checkup



- In antenatal checkup majority of respondents were performing interventions like distribution of IFA tablets, tetanus injections, weight measurement, abdominal checkup and Hb test.
- Blood test (rho), counseling on spacing methods, urine test were least performed.
- In many sub centers in Narnaul, haemoglobinometer to measure Hb was not available.

Factors Influencing Performance of Trained Personnel

- The percentage of SBAs in PHCs citing lack of supportive supervision as a factor was double than that in the hospitals, but strangely it was not mentioned by the health post of SBAs, perhaps because they did not expect it.
- Lack of equipment appears to be a much bigger issue for sub centres and PHCs than for hospitals (particularly in Narnaul).
- Lack of community support did not appear to be a big issue, except for the SBAs.

FIGURE 11- Factors Influencing Performance of Trained Personnel

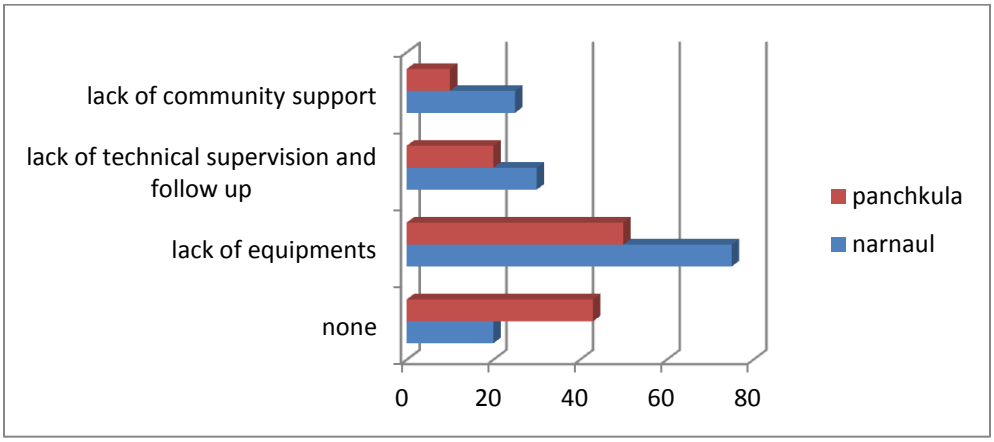
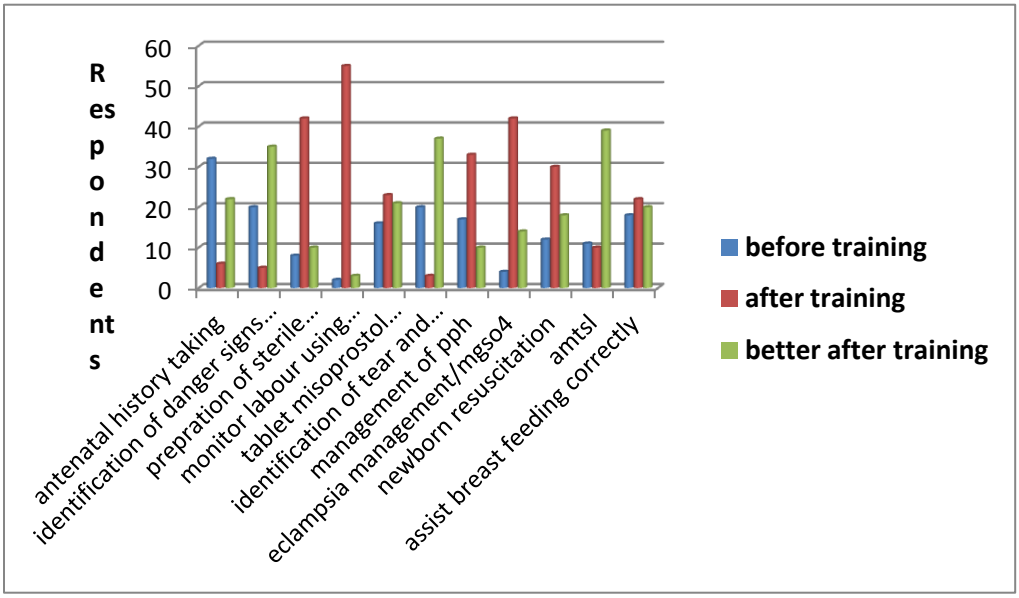
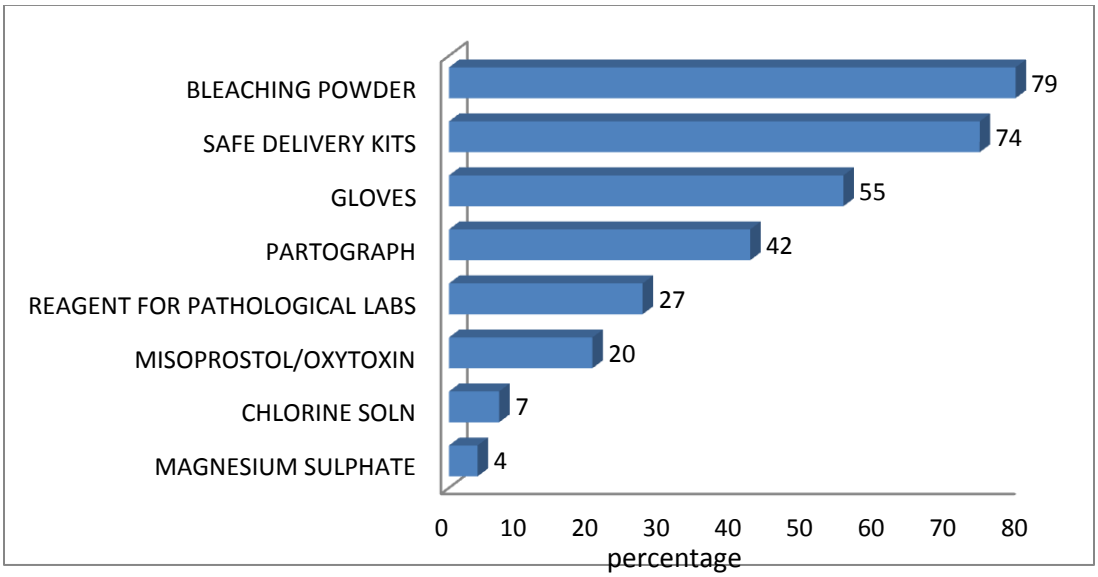


FIGURE 12- Skills improved after training



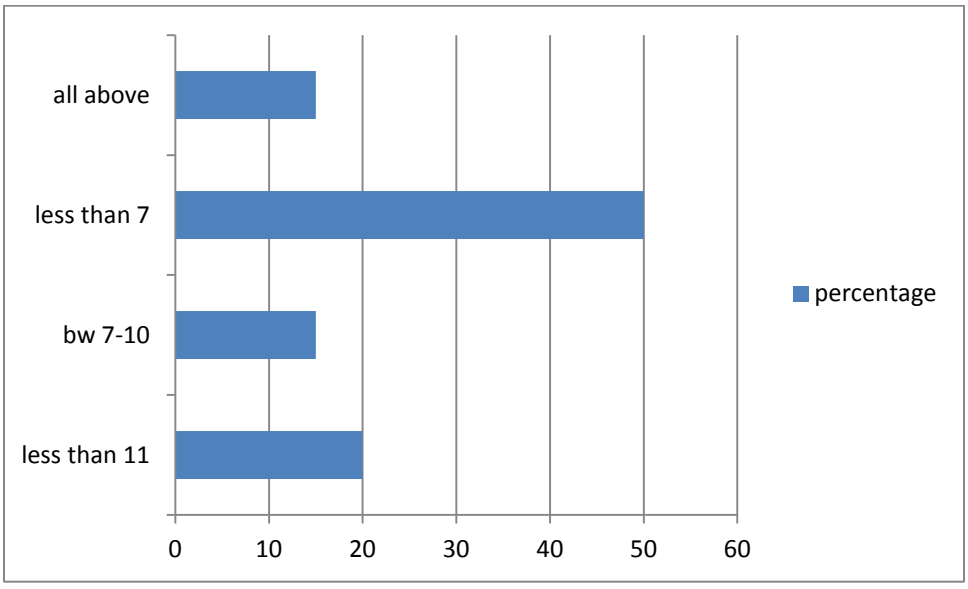
Skills which were mainly affected by training were use of partograph, but still after training they were not much aware of all its components, identification of danger signs were improved after training, ATMTSL, newborn resuscitation, preparation of sterile equipments, eclampsia management were also improved after training, where as skills like antenatal history taking, breast feeding were not much affected.

FIGURE 13-Logistics Availability



- Safe delivery kits and bleaching powder, availability of other essential stock for SBA was sufficient.
- Only 20 per cent of health facilities had Misoprostol or Oxytocin supplies needed for AMTSL, and even fewer (4%) had magnesium sulphate which is necessary for treating eclampsia.

FIGURE 14-Anemia and its Categories



According to WHO recommendations, haemoglobin level below than 11dl/gm is considered as anemic they have divided three categories of anemia-

- Less than 11gm/dl-mild anemic
- Between 7gm/dl-moderate anemic
- Less than 7gm/dl anemic-severely anemic

- Majority of the midwives were not aware of anemia and its categories, majority of them reported less than 7gm/dl as anemic and those who need interventions (IFA tablets). They were not aware of use of haemoglobinometer to check the level of haemoglobin.
- Around 50 % reported less than 7 as anemic.
- Around 15% were able to categories anemia correctly.

Recommendations

- National standards are required to monitor the practice of ANMs and staff nurses; these standards must go beyond the administrative tasks of reviewing records and ensuring a supportive and capacity-building environment.
- All health workers should possess a copy of the IPHS guidelines for ANC, SBA, newborn care and PNC in Hindi.
- The issue of partograph, decision making skills based on the progress of labor, and use of the partograph urgently needs to be addressed.
- Provision of exchange visit (non-functional birthing center to functional birthing center) will be more beneficial in terms of positive support to the newly trained SBAs to implement their skills.
- Coordination between training center and logistic department will help to maintain continuity of SBA skills, and skill retention.
- All health workers should possess the guidelines for infrastructure and stock requirements, so that they too can monitor the maintenance of required standards.

Conclusion

- The study found gaps between ideal SBA training site standards and actual practice particularly in Narnaul district especially in core SBA skills.

JUSTIFICATION = Development of skills and competence require repeated + supervised practice in clinical area and their assessment.

ASSUMPTION = Level of competency has been reached based on simulation in class room and attendance.

- Our study indicates the need for a supportive environment that is properly equipped with supportive management of the facility which SBAs cannot maintain and practice their skills, and cannot provide the quality of care that they have been trained to provide.

- We have also shown that the reasons for low scores may be due to lack of practice, and therefore facilities need to make more efforts to encourage women to deliver in health facilities.
- These efforts should include improvement of the health facility, as well as community outreach to increase trust of community members in their health facility.

Learning from the Summer Training Programme

From Organization

- It helped in the understanding of structure, functioning and culture of an organization.
- It helped me in understanding the making of proposals and how to make budgets for the government projects.
- It helped me in understanding how to manage a project for its successful running.
- It helped me in understanding the psychology of the trainees and trainers who are undergoing SBA training.
- I came to know about the importance of proper documentation of files. Proper documentation helps in saving a lot of time.
- I understood the challenges faced in respect of the working of the staff and how to make the staff work efficiently.
- It helped me to know about the functioning of the various health programs running under NRHM, Haryana.

General Learning

- Tasks for each day should be decided well in advance and kept SMART – Smart, Measurable, Achievable, Realistic and Time bound.
- Notes of daily work should be made at the end of each day. This helped me in writing the report towards the end of my summer training.
- Being systematic is important. It helps in completing the work at a faster pace.
- It provided me an opportunity for my personal as well as professional development.
- It helped me in using the subjects and skills learned in the first year of Post Graduate Diploma in Hospital & Health Management practically and helped me in understanding the importance of all the subjects learned in the 1st year of study.
- Rough draft is necessary and even if many rough drafts are made they should be apt as they are useful in making the final draft.
- I was asked to frame some letters for the funding agencies which helped in improving my communication skills.
- Interaction with various staff members helped me in improving my communication skills accordingly.

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ANNEXURES

ANNEXURE-I

QUESTIONNAIRE FOR ANMS AND STAFF NURSES TO ASSESS THE IMPACT OF TRAINING RELATED TO MATERNAL HEALTH

NAME-

Designation of the service provider	ANM/ STAFF NURSE
GENDER	
For how long have you been working as service provider	
Do you provide maternal health services	
From where have you received your training?	
Have you received any of the following training?	SBA EMOC BLOOD STORAGE RTI/STI IMMUNIZATION
In which year you received your training?	
How many clients did you see in a week?	

ANNEXURE-II

PERFORMANCE ANALYSIS CHECKLIST FOR S.B.A TRAINING

CORE SKILLS	BEFORE TRAINING	AFTER TRAINING	IMPROVED AFTER TRAINING
ANTENATAL HISTORY TAKING			
ANTENATAL PHYSICAL EXAMINATION			
ANTENATAL COUNSELLING			
CONDUCTING NORMAL DELIVERY AND NEWBORN CARE			
PROVIDING POST PARTUM CARE			
IDENTIFICATION OF DANGER SIGNS DURING PREGNANCY,LABOUR DELIVERY AND POST PARTUM PERIOD			
HEALTH EDUCATION AND COUNSELLING			
PREPARATION OF STERILE GLOVES			
MONITOR LABOUR USING PARTOGRAPH			
IDENTIFY TEAR AND MANAGE			
TABLET MISOPROSTOL ADMINISTRATION			
MANAGEMENT OF PPH			

NEWBORN RESUSCITATION			
PERFORM SUCTION,MAINTAIN AIRWAY,ESTABLISH BREATHING			
ASSIST BREAST FEEDING CORRECTLY			
ADMINISTRATION OF MAG SULPHATE			
PERFORM DIGITAL REMOVAL OF CLOT FROM VAGINA			
NURSING MANAGEMNT OF ECLAMPSIA			
IDENTIFICATION OF COMPLICATIONS OF-			
PREGNANCY			
LABOUR			
POST PATRTUM			
NEO NATAL			

CODE FOR DATA ENTRY

1=BEFORE TRAINING,2=AFTER TRAINING,3=IMPROVED AFTER TRAINING

ANNEXURE-III

PERFORMANCE ANALYSIS OF S.B.A TRAINED STAFF NURSES AND ANMS

(KNOWLEDGE AND SKILLS ASSESMENT TOOL)

QUES1=WHAT IS MATERNAL DEATH?

- YES(FULLY CORRECTLY)
- DNT KNOW
- YES(PARTIALY CORRECT)

QUES2= WHAT ARE THE SPECIFIC DANGER SIGNS OF PREGNANCY?

- HIGH B.P
- HEAVY VAGINAL BLEEDING
- BLURRING OF VISION
- SEVERE ABDOMINAL PAIN
- FITS OR CONVULSIONS
- SWELLING OF LIMBS

QUES3=WHAT ARE THE SPECIFIC DANGER SIGNS OF DELIVERY?

- PREMATURE RUPTURE OF MEMBRANE
- PROLONGED LABOUR
- RETAINED PLACENTA
- EXCESSIVE VAGINAL BLEEDING
- MAL POSITIONING OF FETUS
- PPH

QUES4=WHAT ARE THE STEPS OF MANAGEMENT OF ECLAMPSIA ITS RECOGNITION AND REFFERAL?

- MANAGE AIRWAY
- MANAGE BREATHING
- MANAGE CIRCULATION
- MAGNESIUM SULPHATE IV
- REFERRAL
- DON’T KNOW

QUES 5= WHAT ARE THE SPECIFIC COMPONENTS OF PARTOGRAPH?

- PATIENT INFORMATION
- FETAL CONDITION
- PROGRESS OF LABOUR
- MATERNAL CONDITION
- DON'T KNOW

QUES 6=WHAT IS PARTOGRAPH?

- AWARE
- KNEW ITS USAGE ,HOW TO PLOT IT TO MONITOR LABOUR
- NEVER USED IT

QUES 7=DO YOU PLOT PARTOGRAPH RECORD WITH EVERY DELIVERY?

- YES
- NO

QUES 8=WHAT ARE THE STEPS OF AMTSL

- ADMINISTRATION OF OXYTOXIC DRUGS
- CONTROLLED CORD TRACTION
- FUNDAL MASSAGE/CORD CUTTING
- DON'T KNOW

QUES 9=MANAGE PROLONGED LABOUR?

- IV FLUIDS
- ANTIBIOTICS
- ACCELERATION OF LABOUR BY OXYTOXIN
- CAESARIAN SECTION
- REFFRAL
- DON'T KNOW

QUES 10=WHAT RE THE OBSTETRICAL COMPLICATION REQUIRING REFRRAL

- CESSATION OF LABOUR PAIN
- CERVICAL DYSTOCIA
- MAL POSITIONING OF LABOUR
- EARLY RUPTURE OF MEMBRANE
- SHOCK/UNCOUNCIOUSNESS
- HEAVY BLEEDING BEFORE/AFTER PLACENTA COMES OUT
- FITS/CONVULSIIONS

- CORD AROUND BABYS BECK
- RETAINED PLACENTA
- FLACCID UTERUS
- LACERATION/TEAR
- OTHERS

QUES 11=POSTPARTUM DANGER SIGNS

- EXCESSIVE VAGINAL BLEEDING
- FITS/CONVULSIONS
- PROLAPSED UTERUS
- HIGH FEVER WITH OR WITHOUT RIGORS
- UNCONCIOUSNESS

QUES 12=STEPS IN PREVENTION OF NEONATAL TETANUS

- PROPER IMMUNIZATION OF PREGNANT WOMEN BEFORE DELIVERY
- CLEAN DELIVERY PRACTICES
- PROPER CORD CARE
- DON'T KNOW

QUES 13=WHAT IS ANEAMIA AND ITS CATEGORIES

- HB<11
- HB b/w 7-10
- Hb<7
- ALL

QUES 14= PLACENTAL EXAMINATION

- MEMBRANE IS EXAMINED FOR RUPTURE OR WHOLE
- STERLIZATION OF PLACENTA BFOR DISPOSE
- MEMBRANE IS LOOKED FOR LOBES

QUES 15=ANTENATAL CHECKUP INCLUDES?

- BLOOD TEST
- URINE TEST
- Hb test
- ABDOMINAL CHECKUP
- WEIGHT MEASUREMENT
- BLOOD PRESSURE CHECKUP
- TETANUS INJECTION

- IFA TABLETS

QUES 16=ACTIVE MANGEMNT OF PPH INCLUDES

- MISOPROSTOL S/L 600MG(AFTER DELIVERY)
- IV INFUSION LACTATE DEXTROSE SOLN
- IV OXYTOXIN

QUES 17=WHAT DO YOU THINK WHICH STAGE OF PREGNANCY NEEDS MORE CARE AND MANGEMENT

- ANTENATAL
- INTRANATAL
- POSTNATAL

QUES 18=WHICH OF THE FOLOWING PROCEDURE U CAN PERFORM CORRECTLY

- STERLIZATION OF GLOVES AND EQUIPMENTS=YES/NO
- ASSES FOETAL DISTRESS=YES/NO
- DIFFERENTIAL PERINEUM TEARS AND THEIR TREATMENT=YES/NO
- ASSIST BREAST FEEDING METHODS=YES/NO
- REMOVAL OF CLOTS FROM VAGINA=YES/NO

QUES 19-WHICH OF THE FOLLOWING LOGISTICS ARE AVAILABLE IN HEALTH FACILITIES?

- BLEACHING POWDER
- SAFE DELIVERY KITS
- GLOVES
- PARTOGRAPH
- REAGENT FOR PATHOLOGICAL LABS
- MISOPROSTOL/OXYTOXIN
- CHLORINE SOLUTION
- MAGNESIUM SULPHATE

QUES 20- WHAT ARE THE FACTORS INFLUENCING YOUR PERFORMANCE ACORDING TO YOU?

- LACK OF EQUIPMENTS
- LACK OF COMMUNITY SUPPORT
- LACK OF TECHNICAL SUPERVISION AND FOLLOW UP
- NONE