Internship Training

At

INDIA HEALTH ACTION TRUST

"A Study to assess the knowledge level of ASHA worker on HBNC services"

By

Apoorva

PG/14/012

Under the guidance of

Dr.Dhananjay Srivastava

Post Graduate Diploma in Hospital and Health Management

2014-16

International Institute of Health Management Research

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that Apoorva, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at India health action trust from February,2016 to April,2016.

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish him all success in all his future endeavours.

Dr. A.K. Agarwal
Academics and Student Affairs
IIHMR,Delhi

Dr.Dhananjay Srivastava [redacted],
Associate professor
IIHMR,Delhi

INDIA HEALTH ACTION TRUST

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Phone : 0581-2520019

(Completion of Dissertation from INDIA HEALTH ACTION TRUST)

The certificate is awarded to
Dr. APOORVA

In recognition of having successful completion of her
Internship in the department of

COMMUNITY PROCESS
(RMNCH+A)

Has successfully completed her Project on

A Study To Assess Knowledge of ASHA Worker Regarding HBNC Services In Shahjahanpur District Of Uttar Pradesh

From February 1st,2016 to April 30th,2016

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.
We wish her all the best for future endeavors

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CERTIFICATE OF APPROVAL

The following dissertation titled "A study to assess knowledge of ASHA regarding HBNC services in Shahjahanpur district of Uttar Pradesh" at INDIA HEALTH ACTION TRUSTis hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of Post Graduate Diploma in Health and Hospital Management for which it has been submitted.

It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name | Signature

Dr Dharmesh Lal
PMH

Dr Dhananjay.

Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Apoorva,** a graduate student of the **Post-Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled "**A Study To Assess Knowledge of ASHA Worker Regarding HBNC Services In Shahjahanpur District Of Uttar Pradesh**" at "**IHAT**" in partial fulfilment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

INDIA HEALTH ACTION TRUST
H.No.33, Green Park
Bisalpur Road, Bareilly-243001

Dr. Dhananjay Srivastava
(ASSOCIATE PROFESSOR)

Umesh Kumar Singh
(ZONAL COMMUNITY SPECIALIST)

PREFACE

The PGDHM (hospital and health management) course is well structured and integrated course of management studies. The main objectives of practical training at PGDHM level is to develop skill in students by supplement to the theoretical study of management in general. Professors give us theoretical knowledge of various subjects in the institute. But we are practically exposed of such subjects when we get the training in the organization. It is the training through which we come to know that what an organization is and how it works. During this whole training I got a lot of experience and came to know about management practices in real that how it differs from those of theoretical knowledge and the practically in the real life.

It's very beneficial to learn health care delivery system at various levels. I observed the implementation of various National Health Programmes at National/State/District levels, I understood various functions of health systems by interactions with key stakeholders, policy makers, programme managers, academicians and researchers.

During my training period I had an overview of various programmes undertaken By Uttar Pradesh Technical Support Unit including the current status of the programs. I also carried out a small study on-

"A Study to Assess Knowledge level of ASHA worker on HBNC services in Shahjahanpur District of Uttar Pradesh"

I have tried to put my best effort to complete this task on the basis of skill that I have achieved during my studies in the institute.

ACKNOWLEDGEMENT

At the onset of the report I would like to express my special gratitude and appreciation for my college authorities for allowing me to pursue my Dissertation from India Health Action Trust, also own as Uttar Pradesh (Technical Support Unit).

I would also like to acknowledge with much appreciation the crucial role of Dr.Dhananjay Srivastava, Associate Professor (IIHMR, Delhi), Mr Bharat Lal Pandey (State Community Team Leader), UP (TSU) and Mr Umesh Singh, Zonal Community Specialist, UP (TSU) who despite of other pre occupations and busy schedule were there to guide me and whose stimulating suggestions and encouragement helped me complete my training.

This training wouldn't have been completed without a substantial support from Dr.Swati Ahlawat, District Technical specialist and a great number of people .So I would like to thank all the consultants in various departments and other staff members at IHAT for being so helpful all the time and making this Dissertation project an unforgettable experience.

A special thanks to Mr Vikas Gothalwal, Executive Director, UP (TSU) and Mrs.Mrinalini Dixit,HR head,UP(TSU).

I would also like to thank Miss Ranabi, Mr. Sukhveer and Mr Anjum Khan and Mr.Irfan Khan for guiding me throughout my field visit. A special thanks to Mr.Vivek Pathak for his support.

Finally, and most importantly, I would like to thank God for allowing me to complete my project, my beloved parents for their blessings and my friends for their help and wishes for the successful completion of this training.

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ABBREVIATIONS

ASHA	ACCREDITED SOCIAL HEALTH ACTIVIST
ANM	AUXILLARY NURSE MIDWIFERY
AWW	ANGANWADI
IMR	INFANT MORTALITY RATE
IHAT	INDIA HEALTH ACTION TRUST
HBNC	HOME BASED NEW BORN CARE
MMR	MATERNAL MORTALITY RATIO
MOHFW	MINISTRY OF HEALTH AND FAMILY WELFARE
NRHM	NATIONAL RURAL HEALTH MISSION
NMR	NEONATAL MORTALITY RATE
RMNCH+A	REPRODUCTIVE,MATERNAL,NEONATAL,CHILD HEALTH+ADOLESCENTS
UP TSU	UTTAR PRADESH TECHNICAL SUPPORT UNIT

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ORGANIZATION PROFILE

UTTAR PRADESH TECHNICAL SUPPORT UNIT

INDIA HEALTH ACTION TRUST, UTTAR PRADESH

BACKGROUND

A Technical Support Unit (TSU) is established for the Government of Uttar Pradesh (GoUP), with the goal of providing techno-managerial support to the GoUP to improve the efficiency, effectiveness and equity of delivery of key RMNCHA interventions. This will be accomplished by supporting the state in the implementation of the nationally launched NRHM RMNCH+A strategy, and in the scale-up of agriculture and financial inclusion services.

The TSU's activities will be focused on the twenty-five most underserved districts in the state, where the aim is to improve RMNCHN service delivery and outcomes within 100 priority blocks. These districts have been selected and agreed upon jointly by GOI, GoUP and the foundation.

The India Health Action Trust (IHAT) will have overall responsibility for executing the TSU project in Uttar Pradesh. The University of Manitoba (UM) will provide key technical and managerial support to all RMNCHN areas, and financial inclusion/agriculture. John Snow International Research & Training Institute Inc. (JSI) will provide technical inputs in the areas of strategic planning and donor/stakeholder coordination, supply/cold chain management, new born care, and immunization. The JSI will also facilitate linkages and alignment of project activities to the Government of India (GoI) policies by providing support at national level.

ORIGIN AND HISTORY

Uttar Pradesh is India's most populous state, with approximately 200 million people, and with weak health infrastructure and poor health outcomes. There is a tremendous opportunity to improve the state execution capacity to enhance the efficiency, effectiveness and equity in health and development. This is the basis upon which the Bill & Melinda Gates Foundation (the foundation) has collaborated to provide techno-managerial assistance to the Government of Uttar Pradesh (GoUP) and this proposed to set up a Technical Support Unit (TSU) to execute against the Memorandum of Cooperation (MoC) signed by the foundation and GoUP in December 2012. The Government of India (GoI) has launched a renewed campaign to improve RMNCH+A performance across India, and the GoUP has followed up the national launch with its own show of commitment through the state RMNCH+A effort.

VISION

To reduce the adverse health and development outcomes to families, mothers, new-borns and children by achieving high reach, coverage and quality of effective interventions and services for health (reproductive, maternal, neonatal and child health and nutrition in communities and at health facilities), agriculture and financial inclusion

MISSION

The mission of the TSU is to support the government, not to implement on its own. Building the capacity of the health system to execute according to its own mandate, with strong political, bureaucratic and administrative ownership

OBJECTIVES:

The key **objectives** of the project are to:

- Support the GoUP to improve the quality and quantity of FLW interactions at the community level and within households to drive the eight priority RMNCHN behaviors
- Support GoUP in improving its RMNCHN related primary care services at facilities.
- Support GoUP to improve strategies and systems required to deliver improved FLW capabilities and service delivery at primary care facilities
- Support the GoUP in improving its capacity to fund, contract, and regulate/ mandate private providers
- Support the GoUP in improving the scale and quality of community accountability mechanisms

CORE VALUES:

The four core values to address the major barriers like poor accountability, poor focus on outcomes, lack of skilful planning and poor policies are as follows:

1. Efforts to improve leadership and outcome-focus by ensuring bureaucratic ownership of innovations, strong political will under the foundation-GoUP MOU.
2. Strengthening of internal and external accountability mechanisms through developing strong coaching, mentoring and supervisory systems within NRHM and the Directorate of Health/Family Welfare in the GoUP and by creating concurrent monitoring systems using data, dashboards and feedback loops to effect mid-course corrections.
3. Improving the skills and capabilities for FLW and primary care performance by ensuring trainings are conducted with high quality by GoUP and the skills and practices are enhanced through appropriate supportive supervision mechanisms and use of Information Communication Technology (ICT) based solutions to improve FLW and facility performance.
4. Improving policy, planning and coordination by improving private sector stewardship, funding and contracting processes (such as providers for family planning services, developing new incentive schemes and contracting more management capacity out to the private sector for issues like accreditation), supply chain and G2P (Government to person) payment improvements, select human resource and infrastructure improvements at the field level, better annual planning and fund flow mechanisms.

STRATEGIES

Six structural components which define the *modus operandi* of the TSU have been identified as follows:

1. Strengthen FLW skills/capabilities: Strengthen FLW skills/capabilities through supportive supervision and job-aids to improve quality and quantity of interactions in households, at VHNDs and facilities, to increase service access and improve the eight key behaviors around MNCH, nutrition, and FP.
2. Build skills/capabilities of providers at facilities: Improve availability of services and quality of care at first level facilities (e.g., block PHCs) and referral facilities by offering improved training and on-site skills building (e.g., nurse mentors and skills labs) combined with improved case sheets, checklists and workflow management tools.
3. Improve health system management capabilities to support efficient and effective execution to support the above two areas.
    - Ensure robust project planning and funds flow (e.g., PIP processes)
    - Establish appropriate roles and responsibilities for supportive supervision at the block, district and state levels
    - Leverage ICT to improve data, dis-intermediation, demand and to drive performance efficiencies, especially among FLWs and facilities
    - Create robust systems for data collection, analysis, and planning to improve management of the program (e.g., MCTS, HMIS)
    - Create robust concurrent monitoring systems to validate data collection by the system and feedback information for immediate and mid-course correction
    - Assist the government to execute existing incentive schemes at scale by improving data management, planning and streamlining payment systems
4. Support critical infrastructure improvements at the health system level in collaboration with other DPs: support select cross-cutting areas of the health system that act as critical bottlenecks to the first two areas listed above

- Improve supply chain and cold chain management to minimize stock out of essential drugs
- In our role as the state lead partner, ensure alignment with donor/partner efforts in the state; coordinate with other 'units' to catalyze the overall response especially around creating critical infrastructure (e.g. PHCs, FRUs) and HR (staff nurses, supervisors, etc.)

5. Improve the government's ability to be better stewards of the private sector, through better management and contracting approaches:

- Assist the government with devising and executing schemes and contracts to outsource select provision to the private sector (e.g., ORS/Zinc scheme to improve distribution, institutional deliveries, clinical services for FP, 'outsourced' management of FRU staff through 'mother NGOs')
- Assist with improving accreditation and payment systems to enable private providers to be paid by the government to increase coverage – e.g., contracting of agencies (such as Public Private Interface Agencies) to oversee accreditation processes and to streamline their function.
- Explore potential options for a primary care pilot involving government and private providers under a capitation-based model
- Work with the World Bank, UNICEF and other partners to ensure harmonization of efforts with other public private partnership (PPP) efforts in the state

6. Enable accountability measures to provide feedback on quality of services, improve external accountability and hence drive program change.

- The NRHM construct includes an external accountability framework that includes social audits and involvement of democratic grass root institutions (Panchayati Raj Institutions) and grievance redressal mechanisms. While progress has been slow, senior politicians and bureaucrats are committed to this vision.
- We would support government to strengthen the functioning of existing government-mandated accountability structures such as Village Health and Sanitation Committees (VHSCs), RKS (Rogi Kalyan Samiti) and grievance redressal mechanisms, where beneficiaries can directly register/log their complaints. Our grants would provide state level technical assistance for the state government to contract NGOs to build VHSC capabilities as has been done in other states.

Organogram of the proposed TSU

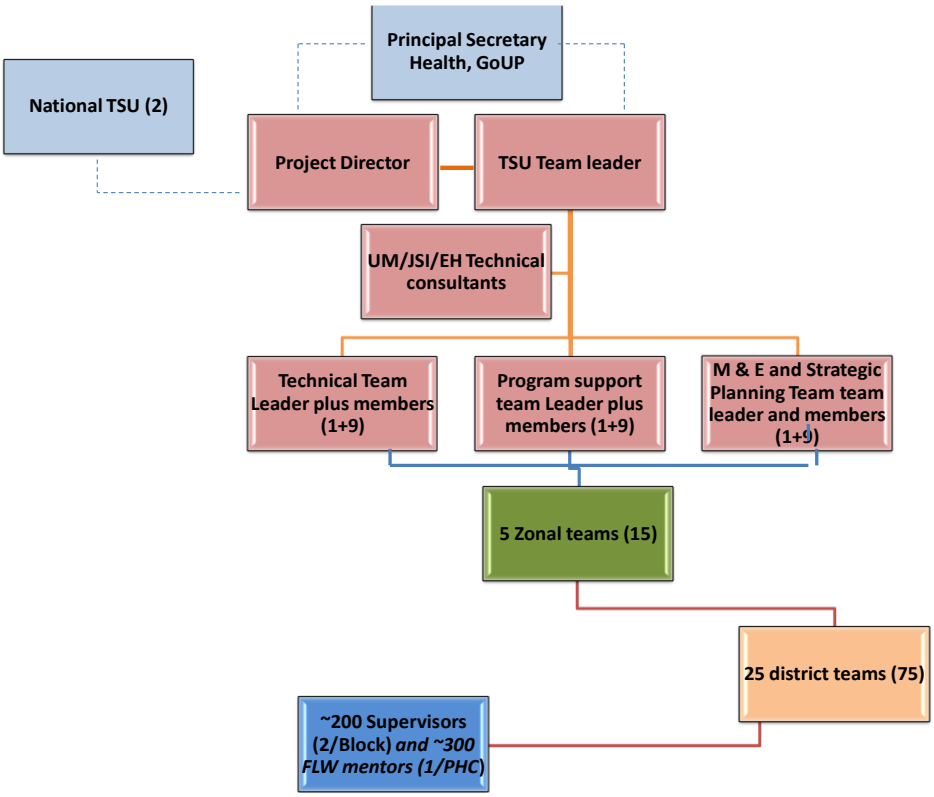

FIGURE 1: ORGANOGRAM OF UP, TSU

1.INTRODUCTION

1.1 BACKGROUND

Globally, the intermediation of community health workers (CHWs) in healthcare delivery is widening as they are inevitable to meet the universal healthcare provision and the millennium development goals.[1] Term 'community health worker' encompasses a wide variety of local healthcare providers ranging from nurse-midwives to home-based
care givers and salaried-staffs to volunteers.[2] The CHWs enable access to and utilization of health services, and inculcate healthy behaviors among the communities.[3]They are preponderantly deployed to cater to underutilized services, unmet health behaviors and underserved populations.
India started one of the largest public sector community health worker initiatives in the world, namely the Accredited Social Health Activist (ASHA) program. **Accredited social health activists** (**ASHAs**) are community health workers instituted by the government of India's Ministry of Health and Family Welfare (MoHFW) as part of the National Rural Health Mission (NRHM).[4]

About ASHA:
The ASHA is a female volunteer selected by the community, deployed in her own village (one in every 1000 population) after a short training on communityhealth.She is preferred to be between 25 and 45 years old, with a minimum formal education of 8 years and demonstrable leadership qualities.ASHAs are not salaried and they belong to the voluntary cadre of health staffs as they get fixed activity-based incentives. Started in 2005-06, currently the ASHA program has spread across the country with 907918 women trained and deployed.
Their responsibilities range from health education to diagnosis of health conditions.Each state oversees the program confining to the guidelines of the National Rural Health Mission (NRHM).[4]

Roles and Responsibilities:

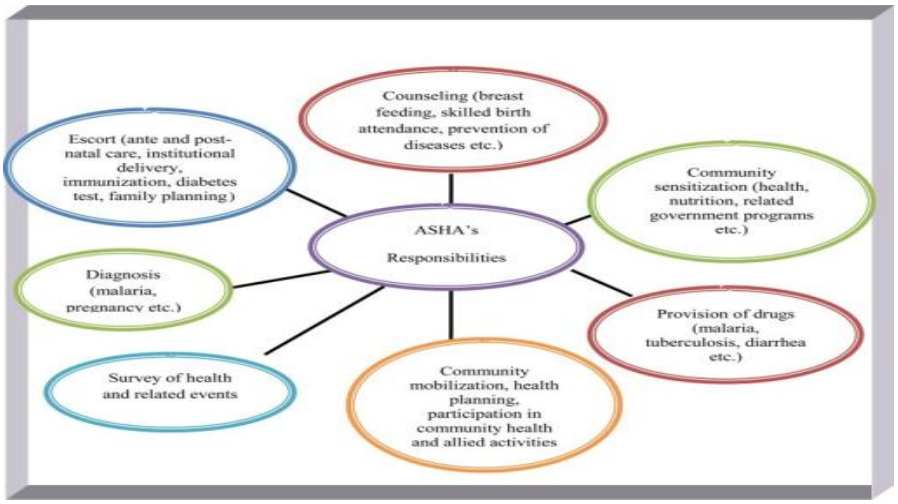

Figure 2: Responsibilities of ASHA

About HBNC

Home based new born care (HBNC) has been under implementation across the country since 2011.It is a strategy adopted by Government of India to overcome the burden of newborn deaths in first week of life and to reach the unreached. It provides the "continuum of care" to newborns and post-natal mothers envisaged under RMNCH+A strategy.

It is centered on ASHA worker and is the main community based approach to new born care.

ASHA will be trained in ASHA 6-7 module in four rounds five days each. These rounds should be completed within one year.

The whole idea of HBNC is to reduce NMR which is contributing more than 40% in IMR.

This research will be based on knowledge of ASHA worker on services provided under HBNC.ASHA workers would be able to perform their duties only if they are equipped with adequate knowledge and skills for the same. Thus it is important to study this aspect since it may give us an insight into the effectiveness of training programs for ASHA workers and may have future policy implications for any changes if required in the same.

1.2 PROBLEM STATEMENT:

Despite remarkable achievements towards the Millennium Development Goals (MDGs) for maternal and child survival, each day 800 women and 7,700 newborns still die from complications occurring during pregnancy, childbirth, postpartum and the neonatal periods. In addition, 7,300 women experience a stillbirth. Feasible, evidence-based solutions exist to prevent these deaths.[5]

SRS 2013: Under 5 Mortality of Uttar Pradesh is 64/1000 and IMR is 50/1000 and neonatal mortality is 35/1000. (According to SRS: 2013)

According to SRS :2013 44% of infant deaths occur within 7 days of birth and 11% deaths occur between 7-28 days of birth, these lead to the total of 55% Neonatal deaths.23% of infant deaths occur between 28 days and within one year of birth, leading to total of 78% of infant deaths.

Evidence shows that implementation of community mobilization through facilitated participatory learning and action cycles with women's groups is beneficial to improve maternal and newborn health, in particular in rural settings with low access to health

services. Community health workers, if trained to proficiency, can assist families in strengthening care giving practices and facilitate appropriate care seeking.

ASHA worker is a key link for the success of RMNCH+A.She can play an important role in improving the status of maternal and child mortality by proper counseling. ASHA is the first point of contact to health system. She should be knowledgeable enough to counsel people on various health practices.

Various trainings are been given to ASHA workers for their skill building and refresher trainings are also been conducted timely to refresh their knowledge.

Many deaths can be prevented by counseling mother to adapt healthy practices before, during and after pregnancy.

1.3 RATIONALE:

Various studies have been conducted on ASHA's training, motivation, working and services provided by her but data about her knowledge on counseling mother to improve mother and child health. But data related to Knowledge of ASHA on HBNC services is very scanty.

Since introduction of HBNC ASHA is doing home visits under this. Effectiveness of HBNC services is totally based on knowledge of ASHA about it.

In this research knowledge assessment of ASHA will be done to get an idea about the efficiency of services and counseling given by her on the basis of her present knowledge about healthy behaviors.

2. REVIEW OF LITERATURE:

Various programs have been started to reduce infant mortality all over the world. As suggested by research maximum number of neonates die in first month of their life. To reduce deaths of newborn ASHA can be an important link, keeping this in mind HBNC program is started. ASHA workers have been given training on home based new born care under 6-7 module training.

The effectiveness of training is based on knowledge level of ASHA workers. Many studies were conducted to assess knowledge level of ASHA worker on child and neonatal health.

A study conducted by SEARCH NGO(Society for Education, Action, and Research),suggested that 20% neonatal mortality was decreased by antenatal and postnatal counselling, birth attendance, and growth monitoring done by Village health worker. Another program started by the government of Chhattisgarh, in partnership with civil society, called the Mitanin program.Mitanins were trained and supported to conduct household outreach, including essential care of newborns, nutritional counselling, case management of childhood illness, and rights-based activities.The Mitanin is widely credited for lowering state IMR from 85 in 2002 (the second highest in the country) to 65 in 2005.These suggest that ASHA workers role is crucial to reduce IMR and NMR.

The studies conducted on knowledge levels of ASHA regarding Child and NEONATAL health suggested that Knowledge level of ASHA workers have good knowledge about breastfeeding. A study conducted in December 2011 to assess the knowledge attitude and practice of ASHA workers regarding child health (under five) in Surendranagar (Gujrat) .The study conducted in 130 ASHA workers, shows that almost 86.2% of ASHA workers had improper knowledge regarding newborn care. Among them 96.92% have good knowledge about breastfeeding. But 70% had poor knowledge regarding interval of breast feeding. Poor knowledge about breast feeding and complimentary feeding seen in 86% and 71% respectively.[6]Another cross sectional study conducted to assess knowledge of ASHA worker on maternal and child health, it was found that 50% of ASHA workers had average knowledge regarding newborn care and importance of breast feeding[7]

All the literature suggested that ASHA worker have an average knowledge regarding newborn care.

3.OBJECTIVES

3.1 RESEARCH QUESTION:

What is the level of knowledge of ASHA on HBNC services given by her?

3.2 OBJECTIVES:

- To measure the knowledge of ASHA regarding HBNC services.
- To develop a scoring scale for the Knowledge of HBNC services.

4.METHODOLOGY

4.1 Study area

This study will be carried in Shahjahanpur district of Uttar Pradesh.As per provisional data of 2011 census, Shahjahanpur urban agglomeration had a population of 346,103, out of which males were 183,087 and females were 163,016. The literacy rate was 69.81 per cent[8] . Selection of state and district is based as per working area. It is proposed to conduct the study in the assigned district to the researcher.Also, Shahjahanpur is among the 25 high priority district of Uttar Pradesh.In Shahjahanpur,further four blocks are selected to conduct the study.The criteria for selection of blocks is based on delivery load.Among four blocks two are high delivery load and two are low delivery load.

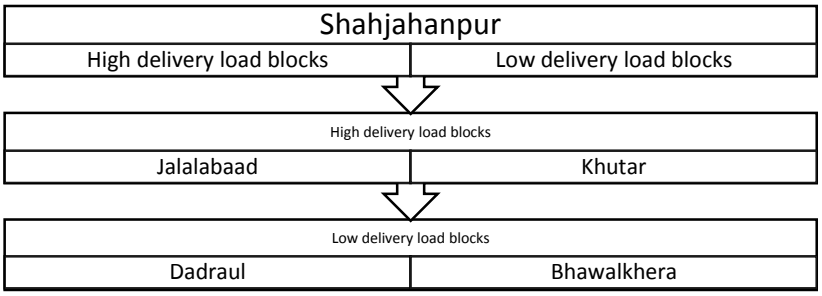

FIGURE 3: STUDY AREA

4.2 Study design

Cross sectional study design

4.3 Study population

HBNC trained ASHA workers.

4.4 Sample size and sampling

Total of 528 ASHA worker are there till February, out of these only 394 are HBNC trained.

A sample of 86 ASHA will be taken collectively from all the 4 blocks. By applying 95% confidence interval and 10% allowable error, a sample of 78 is taken. Further 10% non-response is considered and a total of 86 is taken.

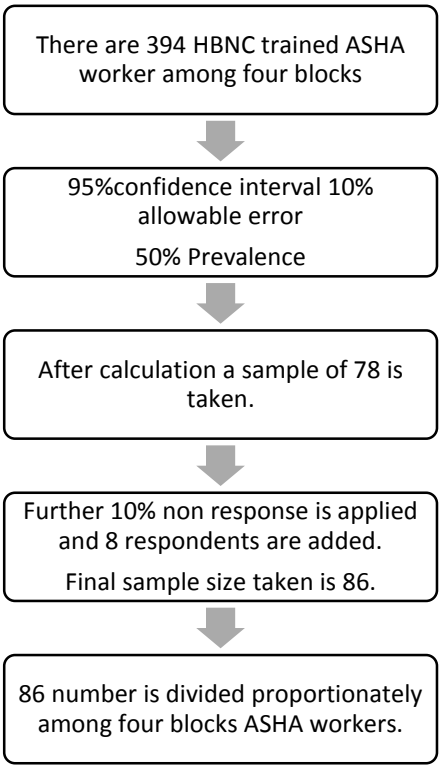

FIGURE 4: Sample size and sampling method

Numbers are:
Bhawalkhera-29(119 trained)
Dadraul-32(130 trained)
Jalalabaad-10(60 trained)
Khutar-15(85 trained)

Sampling -Convenient sampling is done.

Inclusion criteria for sampling

Trained and working ASHA-Those ASHA who has been given any 6-7 module training and is working in field.

ASHA whose name is in the database of block.

Exclusion Criteria for sampling

Inactive ASHA-Those ASHA worker who is not involved in institutional delivery from last 6 months.

ASHA who is not willing to participate in the study.

5.DATA COLLECTION TOOL

By interviewing ASHA on the basis of pre-tested Interview schedule.

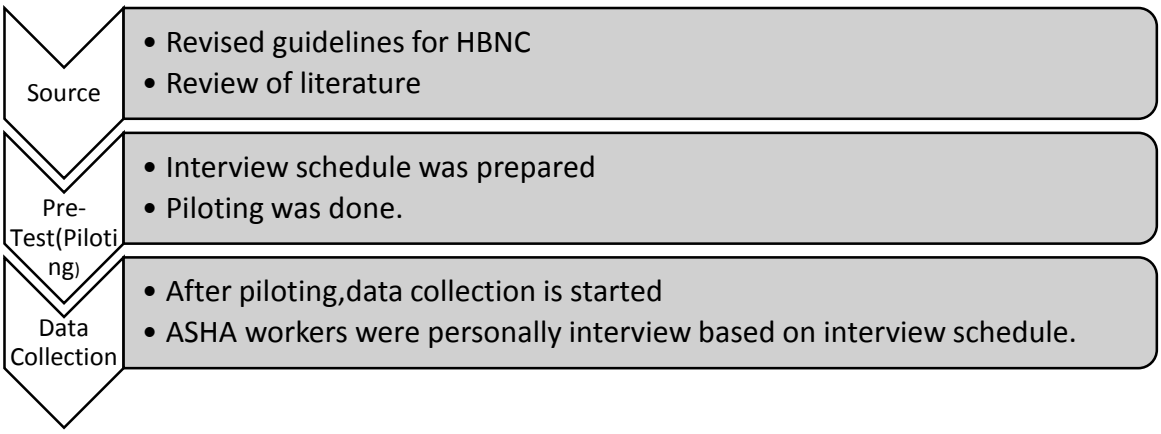

FIGURE 5: DATA COLLECTION TOOL AND TECHNIQUE

6.DATA ANALYSIS

A template based on Interview schedule was prepared in MS excel and analysis was done.

7. RESULTS

Demographic profile of sample:

Age-wise distribution

Age group	Frequency	Percentage
0-25 years	4	5%
26-35 years	36	46%
36-45 years	35	44%
45 above	4	5%
TOTAL	79	100%

Table: 2

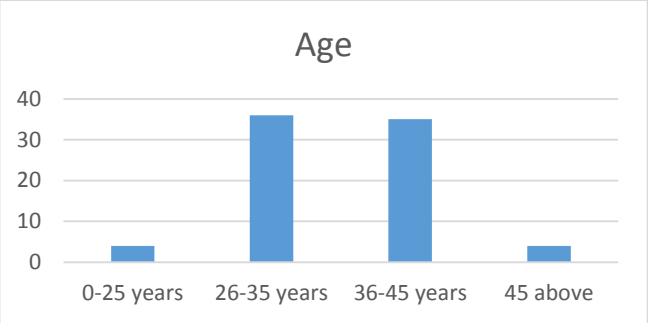

Figure: 6

There are only few ASHA workers below 25 age group and above 45 age group. Maximum number of ASHA worker are in the age group of 26-45 i.e. 90%

Number of children

No. of children	Frequency	Percent
0-2	28	35%
More than 2	51	65%
Total	79	100%

Figure:2

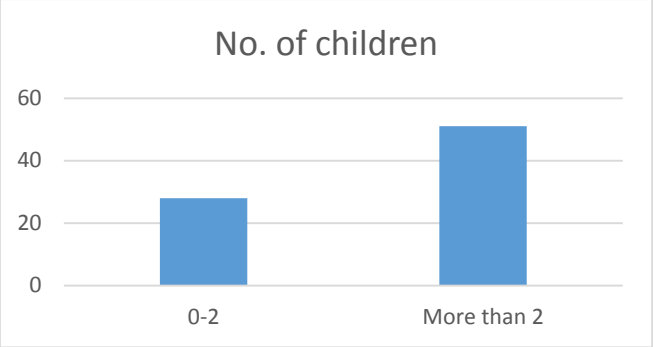

Figure: 7

65% of ASHA workers have children more than 2.

Block-wise sample data

Block name	Frequency	Percent
Bhawalkhera	24	30
Dadraul	30	38
Jalalabaad	10	13
Khutar	15	19
Total	79	100

Table: 3

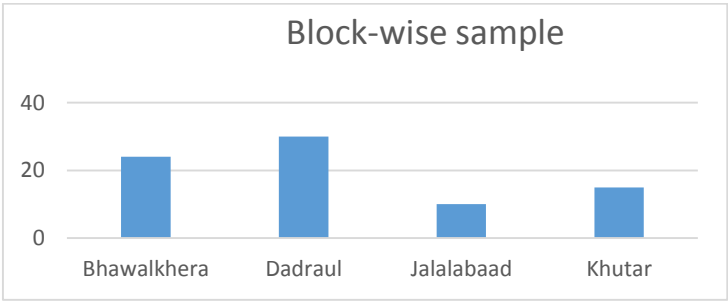

Figure: 8

Dadraul block have more number of trained ASHA worker.

Educational qualification:

Educational qualification	Frequency	Percentage
8th	50	63%
Matric	21	27%
Intermediate	8	10%
Total	79	100%

Table: 4

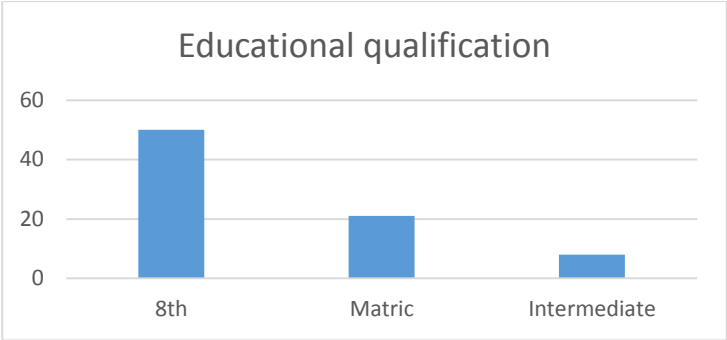

Figure:9

Maximum number of ASHA worker i.e. 63% are 8th pass. There are very less number of ASHA worker who have completed Intermediate.

Demographic profile with mean score

Variable	Category	Mean
Age	0-25 years	32.25
	26-35 years	28.50
	36-45 years	32.54
	45 and above	32.15
No. of children	0-2	29.89
	More than 2	31.22
Educational qualification	8th	28.98
	Matric	35.52
	Intermediate	29.25
Block	Bhawalkhera	28.83
	Dadraul	31.87
	Jalalabaad	28.40
	Khutar	33.13

Table: 5

Overall SCORE

Score	Frequency	Percent
0-22	13	17
23-35	36	46
36-49	30	38
Total	79	100

Table: 6

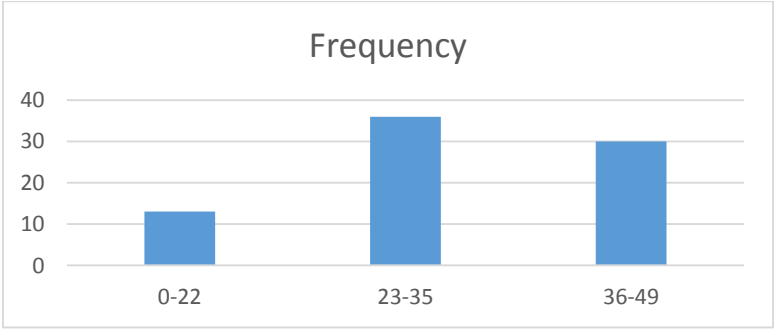

Figure: 10

More number of ASHA falls under moderate (23-35) category.

Percentage of positive response

SECTION B:General knowledge about HBNC			
		EXPECTED KNOWLEDGE	Percentage of positive response
B 1	HBNC सेआपक्यासमझतीहैं?	नवजातशिशुकीदेखभालहेतुगृहभ्रमण	98%
		परिवारएवंमाँकोनवजातशिशुकीदखभालकामहत्वसमझाना	70%
		किटकेमाधयमसेनवजातशिशुकापरिक्षण	73%
		नवजातशिशुकीबीमारीकेबारेमेंसमयसेपतालगाना	43%
		अतिरिस्कवालेबच्चोंकीविशेषदेखभाल	32%
		माँकोप्रसवकेबादकीसमस्याओंकेबारेमेंबतानाएवंउनकाउपाय	48%
		दंपतिकोपरिवारनियोजनकेबारेमें समझाना	52%
B 4	HBNC केअंतर्गतगृहभ्रमणकबशुरूकरतीहैं?	घरपरहुएप्रसवमेंपहलेदिनसे	96%
		संस्थागतप्रसवमेंतीसरेदिनसे	96%
B 5	किस - किसदिनगृहभ्रमणकरतीहैं?	घरपरहुएप्रसवमें-1,3,7,14,21,28,42	94%
		संस्थागतप्रसवमें-3,7,14,21,28,42	94%
SECTION C:knowledge about skills required by ASHA			
C 1	HBNC केअंतर्गतगृहभ्रमणकेदौरान क्याक्याकरतीहैं?	शिशुकावजन	94%
		शिशुकातापमानचेक	89%
		शिशुकोगर्मकैसेरखनाहै,कम्बलसेसिखातीहुँ	76%
		काउंसलिंगकरतीहुँ	66%
		सेप्सिससयाकोईअन्यबीमारीकोपहचाननाएवंउपाययारेफेरकरना	44%
		उच्चतमरिस्कवालेबच्चेपहचाननाएवंइलाज	33%
C 2	शिशुकेवजनकेबारेमेंक्याजानतीहै?	सामान्यवजनकेबच्चे- >2.5 KG	94%
		कमवजनकेबच्चे- <2.5 KG	66%
		अतिकामवजन- <1.8 KG	47%
C 3	शिशुकेतापमानकेबारेमेंक्याजानतीहैं	सामान्यतापमान- 97.7 F OR 36.5 degreeC	76%
		अल्पतपावस्ता- <35 degreeC	6%
		अतिताप (fever)- >99 F or 37.2 C	23%

C 4	संक्रमण/सेप्सिस/इन्फेक्शनके क्यालक्षणहैं?	शिशुकेहाथपैरशिथिलहोगएहो	51%
		दूधपीनाबंदकरदियाहो	62%
		छातीमेंधसावहो	52%
		बुखारहो	61%
		छूनेसेठंडामहसूसहोताहो	38%
C 5	अधिकजोखिमवालेबच्चेकीपह चानकैसेकरतीहैं	शिशुकावजनजन्मकेसमय2000ग्रामसेकमहो	90%
		शिशुकाजन्मसमयसेपूर्वहुआहो(8महीने 14दिनसेपहले)	82%
		जोशिशुपहलेदिनदूधनपिए	87%
C 6	किसबारेमेंकाउंसलिंगकरतीहैं?	माँकेदूधकेमहत्व	63%
		टीकाकरणकामहत्व	81%
		साफ़सफाईकामहत्व	87%
		परिवारनियोजनकेसाधनएवंमहत्व	63%
		नालकोसाफ़एवंसूखारखनेकामहत्व	81%
		जल्दीननहलानेकेबारेमें	56%
		बच्चेकोगरमरखनेकेबारेमें	59%
C 7	माँकेदूधकेमहत्वकेबारेमेंक्याब तातीहैं	जन्मकेतुरंतबादस्तनपानकरवानाचाहिए	92%
		6महीनेतकसिर्फमाँकादूधपिलानाचाहिएऔरकुछनहीं	96%
		हर2-3घंटेमेंदूधपिलानाचाहिए	57%
SECTION D:knowledge about treatment required by newborn			
D 1	अधिकजोखिमवालेबच्चोंकीदे खभालकैसेकरतीहैं	गृहभ्रमणज्यादाकरतीहुँ	65%
		वजनबढ़रहाहैयानहींयेध्यानदेतीहुँ	46%
		बच्चेकोगरमरखनेऔरबारबारसिर्फमाँकादूधपिलानेकलिएस मझतीहुँ	44%
		स्तनपाननकरपानेकीस्थितिमेंमाँकोअपनादूधकैसेनिकलना हैऔरकपचम्मचसेपिलानाहैयेसमझतीहुँ	43%
		सुधारनहोनेकीस्थितिमेंनज़दीकीस्वास्थ्यकेंद्रमेंरेफेरकरतीहुँ	73%
D 2	संक्रमणवालेबच्चोंकीदेखभाल कैसेकरतीहैं	COTRIMOXAZOLE घोलदिनमेंदोबार	0%
		दिनमेंएकबार GENTAMYCIN काइंजेक्शन	0%
		सुधारनहोनेकीस्थितिमेंनज़दीकीस्वास्थ्यकेंद्रमेंरेफेरकरतीहुँ	61%

Data analysis by CHI square test

1. **Research question:** Is there an **association** between age and knowledge level of ASHA worker?

Hypothesis:H_0: age is not associated with knowledge level.

H1: age is associated with knowledge level.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age Category * Score Cat	75	94.9%	4	5.1%	79	100.0%

Age Category * Score Cat Cross tabulation

			Score Cat			
			Low Score	Medium Score	High Score	Total
Age Category	0-25 y	Count	0	2	2	4
		% within Age Category	0.0%	50.0%	50.0%	100.0%
		% within Score Cat	0.0%	5.9%	7.1%	5.3%
		% of Total	0.0%	2.7%	2.7%	5.3%
	26-35 y	Count	8	18	10	36
		% within Age Category	22.2%	50.0%	27.8%	100.0%
		% within Score Cat	61.5%	52.9%	35.7%	48.0%
		% of Total	10.7%	24.0%	13.3%	48.0%
	36-45 y	Count	5	14	16	35
		% within Age Category	14.3%	40.0%	45.7%	100.0%
		% within Score Cat	38.5%	41.2%	57.1%	46.7%
		% of Total	6.7%	18.7%	21.3%	46.7%
Total		Count	13	34	28	75
		% within Age Category	17.3%	45.3%	37.3%	100.0%
		% within Score Cat	100.0%	100.0%	100.0%	100.0%
		% of Total	17.3%	45.3%	37.3%	100.0%

Chi-Square Tests

	Value	df	Sig. (2-sided)	
Pearson Chi-Square	3.500[a]	4	.478	Cramer's V value is.153
Fisher's Exact Test	3.241		.500	
N of Valid Cases	75			

a. 3 cells (33.3%) have expected count less than 5

Interpretation: Pearson Chi-Square statistic was used to find out the association between age and knowledge level. It is a test of association between two categorical variables.If p-value is less than 0.05 then we have a Chi-Square value which is significant. The Chi-square value for the association betweenage and knowledge level was obtained as 3.500 with 4 degrees of freedom and a non-significant probability of .478 (more than 0.05). On the evidence of this data there would appear to be no doubt that there is no-association between age and knowledge level in the population from which this sample of 79 respondents was drawn.

There are 3 cells have expected frequencies less than 5, which makes the chi-square test very unreliable. Therefore we look for the p value for Fisher's test (.500) which is also non-significant which indicates that there is no-association betweenage and knowledge level.

We can see that the strength of association between the variables is weak and positive (Cramer's V= .153).

RESULT: There is no association between age and knowledge level of ASHA worker.

2. **Research question:** Is there an **association** between number of children and knowledge level?

Hypothesis:H_0: number of children is not associated with knowledge level.

H1: number of children is not associated with knowledge level.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Child Cat * Score Cat	79	100.0%	0	0.0%	79	100.0%

Child Cat * Score Cat Cross tabulation

			Score Category			
			Low Score	Medium Score	High Score	Total
Child Category	Less C	Count	5	15	8	28
		% within Child Cat	17.9%	53.6%	28.6%	100.0%
		% within Score Cat	38.5%	41.7%	26.7%	35.4%
		% of Total	6.3%	19.0%	10.1%	35.4%
	More C	Count	8	21	22	51
		% within Child Cat	15.7%	41.2%	43.1%	100.0%
		% within Score Cat	61.5%	58.3%	73.3%	64.6%
		% of Total	10.1%	26.6%	27.8%	64.6%
Total		Count	13	36	30	79
		% within Child Cat	16.5%	45.6%	38.0%	100.0%
		% within Score Cat	100.0%	100.0%	100.0%	100.0%
		% of Total	16.5%	45.6%	38.0%	100.0%

Chi-Square Tests

	Value	df	Sig. (2-sided)	
Pearson Chi-Square	1.671[a]	2	.434	Cramer's V- .145
Fisher's Exact Test	1.712		.441	
N of Valid Cases	79			

a. 1 cells (16.7%) have expected count less than 5.

Interpretation: Pearson Chi-Square statistic was used to find out the association between number of children and knowledge level. It is a test of association between two categorical variables.If p-value is less than 0.05 then we have a Chi-Square value which is significant. The Chi-square value for the association between number of children and knowledge level was obtained as 1.671 with 2 degrees of freedom and a Significant/ non-significant probability less/ more than 0.05. On the evidence of this data there would appear to be no doubt that there is no-association betweennumber of children and knowledge level in the population from which this sample of 79 respondents was drawn.

There are 1 cells have expected frequencies less than 5, which makes the chi-square test very unreliable. Therefore we look for the p value for Fisher's test .441 which is also non-significant which indicates that there is no-association between number of children and knowledge level. We can see that the strength of association between the variables is weak and positive (Cramer's V= .145)

Research question: Is there an **association** between educational qualification and knowledge level?

Hypothesis:H_0: educational qualification is not associated with knowledge level.

H1: educational qualification is associated with knowledge level.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Educational qualification * Score Cat	79	100.0%	0	0.0%	79	100.0%

Educational qualification * Score Cat Cross tabulation

			Score Cat			
			Low Score	Medium Score	High Score	Total
Educational qualification	8th	Count	11	25	14	50
		% within Educational qualification	22.0%	50.0%	28.0%	100.0%
		% within Score Cat	84.6%	69.4%	46.7%	63.3%
		% of Total	13.9%	31.6%	17. \7%	63.3%
	Matric	Count	1	5	15	21
		% within Educational qualification	4.8%	23.8%	71.4%	100.0%
		% within Score Cat	7.7%	13.9%	50.0%	26.6%
		% of Total	1.3%	6.3%	19.0%	26.6%
	Intermediate	Count	1	6	1	8
		% within Educational qualification	12.5%	75.0%	12.5%	100.0%
		% within Score Cat	7.7%	16.7%	3.3%	10.1%
		% of Total	1.3%	7.6%	1.3%	10.1%
Total		Count	13	36	30	79
		% within Educational qualification	16.5%	45.6%	38.0%	100.0%
		% within Score Cat	100.0%	100.0%	100.0%	100.0%
		% of Total	16.5%	45.6%	38.0%	100.0%

Chi-Square Tests

	Value	df	Sig. (2-sided)	
Pearson Chi-Square	15.539[a]	4	.004	
Fisher's Exact Test	14.156		.004	Cramer's V value is .314
N of Valid Cases	79			

a. 4 cells (44.4%) have expected count less than 5.

Interpretation: Pearson Chi-Square statistic was used to find out the association between educational qualification and knowledge score. It is a test of association between two categorical variables.If p-value is less than 0.05 then we have a Chi-Square value which is significant. The Chi-square value for the association between educational qualification and knowledge score was obtained as 15.539 with 4 degrees of freedom with a significant probability of .004 (less than 0.05). On the evidence of this data there would appear to be no doubt that there is an association between educational qualification and knowledge level in the population from which this sample of 79 respondents was drawn.

There are 4 cells have expected frequencies less than 5, which makes the chi-square test very unreliable. Therefore we look for the p value for Fisher's test.004 which is also significant which indicates that there is an association between educational qualification and knowledge level.

We can see that the strength of association between the variables is moderate positive Cramer's V=.314

8.CONCLUSION

- The knowledge of 62% of ASHA worker falls under low (0-22) and moderate (23-35) category, only 38% of ASHA worker had knowledge score in high (36-49) category.

- It was found that ASHA is not much aware about her role under HBNC program. They had a good knowledge about home visits (96%) and the days on which home visits need to be done (93%).Asha got incentive based on the Performa she had to fill during home visit, this may be the reason for good knowledge about home visit.

- 94% of ASHA knew about normal weight and temperature of child but they have poor knowledge regarding low weight (47%), hypothermia (6%) and fever (23%).If knowledge regarding treatment of sepsis and high risk babies taken most of them did not know treatment at their level. This is the knowledge which is directly associated with IMR/NMR. This need to be given focus to reach HBNC goal.

- If association between educational qualification of ASHA and her knowledge is seen, it was found that there is a significant relationship between both.

Overall knowledge ASHA worker on HBNC services need to be improved.

9.RECOMMENDATION

Short term

- During cluster meeting and ASHA, ANM and Aanganwadi (AAA) meeting, HBNC should be discussed regularly to improve her knowledge.
- Knowledge assessment of their supervisors should be done to gain an idea about their knowledge on HBNC services.

Long term

- Quality assessment of present training program should be done to find out level of training. There can be flaws in training also.

10.LIMITATIONS:

- Generalization of the study is not possible as the sample is not truly representative of the whole population.
- There are chances of observer and recall bias.
- Reliability of answers is not assured.
- Questions in the research study are subjective

ANNEX

FOR RESEARCH PURPOSE ONLY

SURVEY ID:

INFORMED CONSENT FORM

To assess knowledge of ASHA worker on HBNC services

मेरा नाम अपूर्वा है और मैं भारतीय संस्थान से स्वास्थ्य प्रबंधन में रिसर्च कर रही हूँ| मैं आशा की HBNC के बारे में जानकारी पर अध्ययन कर रही हुँ| यह इंडिया हेल्थ एक्शन ट्रस्ट की इंटर्नशिप कार्यक्रम के द्वारा समर्थित है|

इस रिसर्च के भाग के अंतर्गत मैं आपकी HBNC के बारे में जानकारी के बारे में जानने के लिए 20 मिनट का साक्षात्कार करुँगी| इस साक्षात्कार में ली गई आपकी व्यक्तिगत जानकारी को गुप्त रखा जायेगा और इस में भाग लेने से आपको या आपकी नौकरी को कोई हानि नहीं होगी| आप किसी भी समय साक्षात्कार को रोक सकती है| इस अध्ययन में भाग लेने से आपको कोई सीधा लाभ नहीं होगा,पर इस जानकारी को आपके स्थानीय अधिकारीयों को दिया जायेगा जो आपकी ट्रेनिंग के लिए उत्तरदायी है|

इस में भाग लेना पुर्णँतया आपकी मर्ज़ी है| क्या आप अधययन के लिए तैयार है?

हस्ताक्षर

SECTION A:Personal information			
Subject id: ____			
DATE of Interview:_____			
A1	नाम :		
A2	उम्र:		
A3	वैवाहिक स्थिति: बच्चे:		
A4	ब्लॉक का नाम:		
A5	HBNC प्रशिक्षित:		
A6	यदि हाँ,कब प्रशिक्षण हुआ:		
A7	शैक्षिक योग्यता:		
SECTION B:General knowledge about HBNC			
		EXPECTED KNOWLEDGE	ASSESSED
B1	HBNC से आप क्या समझती हैं?	नवजात शिशु की देखभाल हेतु गृह भ्रमण	
		परिवार एवं माँ को नवजात शिशु की दखभाल का महत्व समझाना	
		किट के माधयम से नवजात शिशु का परिक्षण	
		नवजात शिशु की बीमारी के बारे में समय से पता लगाना	
		अति रिस्क वाले बच्चों की विशेष देखभाल	
		माँ को प्रसव के बाद की समस्याओं के बारे में बताना एवं उनका उपाय	
		दंपत्ति को परिवार नियोजन के बारे में समझाना	
		अन्य	
B2	क्या आपके पास HBNC किट मौजूद है?	हाँ	
		नहीं	
		ख़राब है	
B3	यदि हाँ,तो किट में क्या क्या चीज़ें है	उपकरण- i.घडी	
		ii.थर्मामीटर	
		iii.वजन पैमाना एवं उसका गोफन	
		iv.शिशु के लिए कम्बल	
		v.शिशु की चम्मच	
		दवाइयां-i.gentian violet paint	

		ii.syrup paracetamol	
		iii.syrup cotrimoxazole	
		उपभोग्य- i.रुई	
		ii.पट्टी	
		iii.साबुन एवं साबुनदानी	
B4	HBNC के अंतर्गत गृह भ्रमण कब शुरू करती हैं?	घर पर हुए प्रसव में पहले दिन से	
		संस्थागत प्रसव में तीसरे दिन से	
		अन्य	
B5	किस -किस दिन गृह भ्रमण करती हैं?	घर पर हुए प्रसव में-1,3,7,14,21,28,42	
		संस्थागत प्रसव में-3,7,14,21,28,42	
		अन्य	
SECTION C:knowledge about skills required by ASHA			
C1	HBNC के अंतर्गत गृह भ्रमण के दौरान क्या क्या करती हैं?	शिशु का वजन	
		शिशु का तापमान चेक	
		शिशु को गर्म कैसे रखना है,कम्बल से सिखाती हुँ	
		काउंसलिंग करती हुँ	
		सेप्सिस या कोई अन्य बीमारी को पहचानना एवं उपाय या रेफेर करना	
		उच्चतम रिस्क वाले बच्चे पहचानना एवं इलाज	
		अन्य	
C2	शिशु के वजन के बारे में क्या जानती है?	सामान्य वजन के बच्चे- >2.5 KG	
		कम वजन के बच्चे- <2.5 KG	
		अति काम वजन- <1.8 KG	
C3	शिशु के तापमान के बारे में क्या जानती हैं	सामान्य तापमान- 97.7 F OR 36.5 degreeC	
		अल्पतपावस्ता- <35 degreeC	
		अतिताप (fever)- >99 F or 37.2 C	
C4	संक्रमण/ सेप्सिस/इन्फेक्शन के क्या लक्षण हैं?	शिशु के हाथ पैर शिथिल हो गए हो	
		दूध पीना बंद कर दिया हो	
		छाती में धसाव हो	
		बुखार हो	
		छूने से ठंडा महसूस होता हो	
		अन्य	

C5	अधिक जोखिम वाले बच्चे की पहचान कैसे करती हैं	शिशु का वजन जन्म के समय 2000 ग्राम से कम हो	
		शिशु का जन्म समय से पूर्व हुआ हो(8 महीने 14 दिन से पहले)	
		जो शिशु पहले दिन दूध न पिए	
		अन्य	
C6	किस बारे में काउंसलिंग करती हैं?	माँ के दूध के महत्व	
		टीकाकरण का महत्व	
		साफ़ सफाई का महत्व	
		परिवार नियोजन के साधन एवं महत्व	
		नाल को साफ़ एवं सूखा रखने का महत्व	
		जल्दी न नहलाने के बारे में	
		बच्चे को गरम रखने के बारे में	
		अन्य	
C7	माँ के दूध के महत्व के बारे में क्या बताती हैं	जन्म के तुरंत बाद स्तनपान करवाना चाहिए	
		6 महीने तक सिर्फ माँ का दूध पिलाना चाहिए और कुछ नहीं	
		हर 2-3 घंटे में दूध पिलाना चाहिए	
		अन्य	
SECTION D:knowledge about treatment required by newborn			
D1	अधिक जोखिम वाले बच्चों की देखभाल कैसे करती हैं	गृह भ्रमण ज्यादा करती हुँ	
		वजन बढ़ रहा है या नहीं ये ध्यान देती हुँ	
		बच्चे को गरम रखने और बार बार सिर्फ माँ का दूध पिलाने क लिए समझती हुँ	
		स्तनपान न कर पाने की स्थिति में माँ को अपना दूध कैसे निकलना है और कप चम्मच से पिलाना है ये समझती हुँ	
		सुधार न होने की स्थिति में नज़दीकी स्वास्थ्य केंद्र में रेफेर करती हुँ	
		अन्य	
D2	संक्रमण वाले बच्चों की देखभाल कैसे करती हैं	COTRIMOXAZOLE घोल दिन में दो बार	
		दिन में एक बार GENTAMYCIN का इंजेक्शन	
		सुधार न होने की स्थिति में नज़दीकी स्वास्थ्य केंद्र में रेफेर करती हुँ	
		अन्य	

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