



## A STUDY TO ASSESS KNOWLEDGE, PRACTICES OF ASHA AND FACTORS INFLUENCING PROVISION OF HBNC IN BAHADURPUR BLOCK OF ALLAHABAD, UTTAR PRADESH

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**ABSTRACT** The guidelines of Government of India on Home based newborn care (HBNC) expects Accredited Social Health Activists (ASHA) who are first contact of primary health care in India, to make home visits to promote essential newborn care, identify illness, and refer infants if needed. Thus the knowledge and practices of ASHA is one of the crucial aspects of health systems to improve the coverage of community-based newborn health care programmes as well as adherence to essential newborn care practices at the household level. This study was conducted to assess Knowledge, Practices of ASHAs and factors influencing the provision of HBNC services. The study covered 146 ASHAs of Bahadurpur block of Allahabad district in Uttar Pradesh, India. Data was collected by personal interviews through an interview schedule. The data indicated that though the knowledge level is good but they become less efficient when it comes to practicing the services. Lack of HBNC checklists and delayed payments of incentives to ASHAs also affected the provision of HBNC services. Ensuring refresher training, adequate supply, regular monitoring and on time payment of incentives can make provision of HBNC effective and thus help achieving the goal of reduction of neonatal mortality

### KEYWORDS :

#### 1.2 INTRODUCTION

Reducing infant and child mortality is one of the foremost goals of National Health Mission (NHM). The country as a whole has made significant progress in reducing Infant Mortality Rates (IMR). However, it is clear that a high proportion of the infant mortality burden is related to new born deaths, and so further gains in reducing IMR are likely only through a focused effort at implementing evidence-based, cost-effective interventions impacts neonatal health outcomes. IMR (Infant Mortality Rate) of Allahabad is 81 per 1000 live births whereas NMR (Neonatal Mortality Rate) is 60 per 1000 live births as per AHS (Annual Health Survey) 2012-13<sup>1</sup> which is way ahead of national numbers. There is sufficient evidence to demonstrate that despite the increasing number of institutional deliveries a substantial proportion of neonatal deaths occur at home. Thus the provision HBNC is critical. For effective promotion of Home-based newborn care (HBNC), NHM offers several platforms which include the presence of trained Accredited Social Health Activists (ASHA) in every village. The Government of India (GOI) released HBNC guidelines in 2011<sup>2</sup> to increase access to newborn care through ASHAs. The guidelines expect ASHAs to make home visits (7 in case of home deliveries while 6 in case of institutional deliveries) to promote essential newborn care, identify illness, and refer infants if needed. ASHAs receive a performance payment for conducting the visits.

A Situational Analysis on performance of Accredited Social Health Activists to Provide Home-based Newborn Care by **Emily Das.et al** showed that, though the guidelines of Government of India on HBNC expect ASHAs to make home visits to promote essential newborn care, identify illness, and refer infants if needed. None of the trained ASHAs comprehensively covered all questions and signs, and they often skipped assessment items. ASHAs were more likely to ask about breastfeeding, newborn warmth, and crying but less likely to examine or assess for danger signs.<sup>3</sup>

Poor knowledge and practices of ASHAs, who happens to be the first point of contact for health services to the community can become one of the major reasons for poor health indicators related to neonatal health in the country.

#### 1.3 MATERIALS & METHODS

A descriptive, cross sectional study was conducted during March - April 2015 in focused Block (Bahadurpur) of a High Priority District (Allahabad). The ASHAs were randomly selected from the block who

have undergone HBNC training / Module 6-7 training. Block Bahadurpur was selected out of 4 focused Blocks by Simple Random Sampling. Bahadurpur has 245 ASHAs. After calculating the sample size out of 245 ASHAs through formula mentioned below :-

Sample Size = (Distribution of 50%) / ((Margin of Error% / Confidence Level Score) Squared)

#### Finite Population Correction:

True Sample = (Sample Size X Population) / (Sample Size + Population - 1)

At the 95 % confidence interval and 5 % margin of error,

Population= 245 ASHAs, Number of ASHAs to be interviewed was calculated to be 150.

Bahadurpur is divided into 5 clusters out of which 3 clusters were selected randomly to study 150 ASHAs. Four ASHAs did not want to be part of the study. So, the sample studied was 146 ASHAs.

Personal Interviews were conducted using an Interview Schedule. Filled interview schedule were checked for completeness and correctness and data was entered in MS Excel and SPSS – 16 for further analysis.

#### 1.4 RESULTS

##### 1.4.1 Socio Demographic Characteristics of Population

About a one third (35.6 percent) of ASHAs were in the age group of up to 30 years. More than half (56.2 percent) were of the age group 31 to 45 years and few ASHAs (8.2 percent) fell in the age group 46 years and above.

Just around four percent of ASHAs were educated below 8<sup>th</sup> standard whereas majority (43.2 percent) mentioned their education level between 8<sup>th</sup> to 10<sup>th</sup> standard. Around one third ASHAs (30.1 percent) were educated between 10<sup>th</sup> to 12<sup>th</sup> standard and almost 27 percent were educated above the level of 12<sup>th</sup> standard.

Almost all the ASHAs (93.2 percent) were currently married whereas around one percent were widow. Around three percent were separated/divorced.

Agriculture (Own land) was family's main livelihood activity of

around 23 percent of ASHAs. Around 19 percent of ASHA's families had self-employment as livelihood activity whereas 21 percent and 17 percent of ASHA's families had salaried employment, Govt. and Private respectively. Nineteen percent of the ASHA families did daily wage labor for livelihood. Just around one percent had no specific livelihood activity.

**Table-1.1: Socio Demographic Characteristics of ASHAs (n = 146)**

Characteristics		Percentage of respondents
Age	Up to 30 Years	35.6
	31 to 45 Years	56.2
	46 and above Years	8.2
Education	Below 8 <sup>th</sup>	4.1
	8 <sup>th</sup> -10 <sup>th</sup>	43.2
	10 <sup>th</sup> -12 <sup>th</sup>	30.1
	Above 12 <sup>th</sup>	22.6
Marital Status	Single	2.7
	Married	93.2
	Separated/Divorced	2.7
	Widow	1.4
Livelihood	Agricultural (own land)	23.3
	Self-employed	18.5
	Salaried employee (Govt.)	20.5
	Salaried employee (Pri.)	17.1
	Daily wages labour	19.2
	Others	1.4

**1.4.2 Knowledge of ASHA**

Around 62 percent of ASHAs were able to answer correctly in case of home visits while around 64 percent were able to tell the number of visits after institutional delivery. Almost all the ASHAs (95.9 percent) knew regarding early initiation of Breast Feeding i.e. within 1 hour of birth. Mostly all the ASHAs (93.2 percent) answered correctly regarding frequency of Breast Feeding. Majority of ASHAs (90.4%) answered correctly that newborn with a weight less than 2500 grams is termed as Low birth weight.

**Table-1.2: Knowledge of ASHAs (n = 146)**

Items (Knowledge)	Yes (Correct) %	No (In correct) %
Number of Visits (Home Delivery)	61.6	38.4
Number of Visits (Institutional Delivery)	63.7	36.3
Initiation of Breast Feeding	95.9	4.1
Frequency of Breast Feeding	93.2	6.8
Low Birth Weight	90.4	9.6

**1.4.3 Practices of ASHA**

Around 98 percent of ASHAs were advising regarding Breast Feeding. Around 77 percent of all the ASHAs advised the mother about positioning of baby and 73 percent told mothers about exclusive breast feeding. About 62 percent gave information about frequency of feeding whereas almost half (47.9 percent) advised about initiation of breastfeeding. Almost 19 percent also gave advice on colostrum feeding.

Around 73 percent gave advice related to care of cord. Around 88 percent of all the ASHAs advised mothers that cord should be kept dry and almost 86 percent advised that nothing should be applied to the cord.

Forty-two percent of ASHAs gave information regarding maintenance of warmth. Almost all of the ASHAs (92.5 percent) advised to cover the extremities as a measure to maintain temperature while little more than half (55.6 percent) of ASHAs advised for Kangaroo Mother Care in case of low birth weight babies. About 32 percent told about keeping the new born near the mother.

Almost half (51.4 percent) of ASHAs gave advice on Hand washing practices. Forty-two percent of ASHAs gave information about Vaccination.

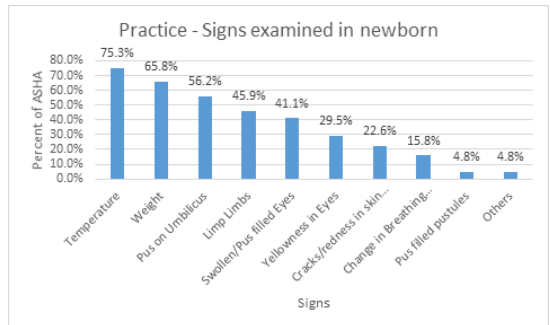
**Table-1.3: Practices of ASHAs (n = 146)**

Advice (Practice)	Yes %	No %
Breast Feeding (General)	97.3	6.7
Initiation of BF	47.9	52.1
Colostrum	18.5	81.5

Exclusive Breast Feeding	72.6	27.4
Position	77.4	22.6
Frequency	61.6	38.4
Cord Care (General)	73.3	26.7
Keeping dry	87.7	12.3
No application	85.6	14.4
Warmth (General)	41.8	58.2
Keep near Mother	32.2	67.8
Covering of Extremities	92.5	7.5
KMC	55.5	44.5
Vaccine	41.8	58.2
Hand Wash	51.4	48.6

**1.4.3.1 Practice: Signs examined in new born during home visits**

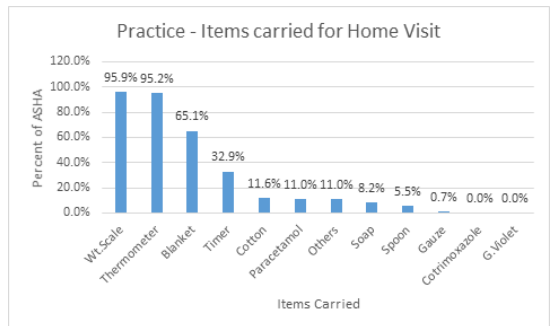
Around three fourth (75.3 percent) of the total ASHAs looked for temperature while about 66 percent checked weight. Around 56 percent checked for pus on umbilicus, about 46 percent looked for limp limbs, about 41 percent looked for pus discharge/swollen eyes, about 30 percent look for yellowness in eyes, about 23 percent looked for cracks/redness on skin folds, about 16 percent looked for change in breathing patterns. Just around five percent looked for pustules while the same percent of ASHAs looked for other signs which majorly included asking for feeding patterns, frequency of urine and stools.



**Fig. 1.1: Practices followed by ASHAs for signs to examined in new born during home visits (N=146)**

**1.4.3.2 Practice: Things carried during the visit to new born**

Most of the ASHAs around (96 percent and 95 percent) carried Weighing scale and Thermometer respectively. Sixty-five percent carried blanket and 33 percent carried timer device. Rest all items are carried by below 12 percent ASHAs with none of the ASHAs carrying Gentian Violet and Tab. Cotrimaxazole.



**Fig.1.2: Practice of ASHAs regarding things carried during the visit to new born (N=146)**

**1.4.4 Influencing Factors**

**1.4.4.1 Percent of ASHAs who received checklist for HBNC**

Around 66 percent of ASHAs received HBNC checklist while about one third (34.2 percent) did not receive. Of those who had received the checklist, more than a sixth confessed that they had not used it.

**Table 1.4: Percent of ASHAs who received & fill checklist for HBNC**

Availability & Practice	Yes	No
Received Checklist (N=146)	96 (65.8%)	50 (34.2%)
Filling of Checklist (N=96)	80 (83.3%)	16 (16.7%)

**1.4.4.2 Percent of ASHAs who have a knowledge regarding**

**incentive to be received for HBNC**

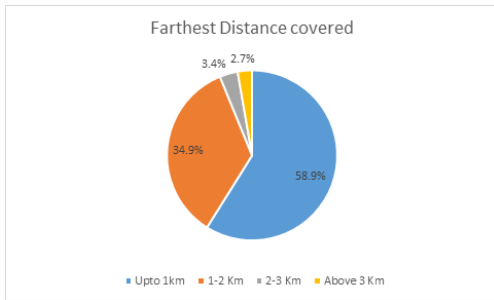
Around three fourth (76.7 percent) of ASHAs had knowledge regarding incentives to be received for HBNC while about one fourth (23.3 percent) were unaware about the incentive.

**Table 1.5: Knowledge of ASHAs about incentive of HBNC (N=146)**

Knowledge of Incentive	Number of ASHAs	Percent
Yes	112	76.7
No	34	23.3
N=146		

**1.4.4.3 Distance covered by ASHA during home visit**

Most of the ASHAs (58.9 percent) covered up to 1 km distance while around one third of the ASHAs (34.9 percent) covered up to 2 kms. About three percent had to go up to 3 kms. while just around three percent covered more than 3 kms.



**Fig.1.3: Distance covered by ASHA during home visit (N=146)**

**1.4.4.4 Problems faced by ASHA during provision of HBNC services**

Majority of ASHAs (60.5 percent) complained about late receipt of incentive. Around 28 percent complained that the beneficiaries didn't listen to them while just 12 percent said that conveyance was a problem.

**Table 1.6: Problems faced by ASHA during provision of HBNC services (N=43)**

Problems faced by ASHAs	Number of ASHAs	Percent
Don't listen	12	27.9
Conveyance	5	11.6
On time Incentive	26	60.5
N=43		

**1.4.4.5 Perception of ASHAs about HBNC Services**

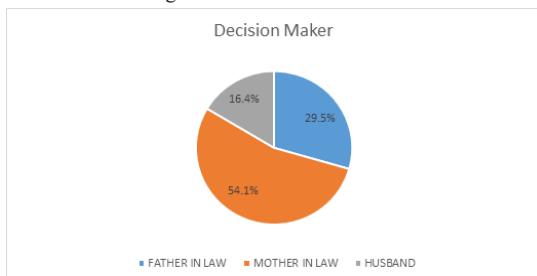
Around 86 percent rated the HBNC services as good while just 14 percent said the services were average.

**Table 1.7: Perception of ASHAs about HBNC Services (N=146)**

Perception about HBNC Services	Number of ASHAs	Percent
Good	125	85.6%
Average	21	14.4%
Poor	0	0.0%
N=146		

**1.4.4.6 Decision maker in the family according to perception of ASHAs**

More than half (54.1) of the ASHAs feel mother in law as the decision maker, while around 30 percent feel father in law as the decision maker. According to 16 percent of ASHAs husbands were the decision makers for care seeking behavior of the mothers



**Fig. 1.4: Decision maker in the family according to perception of ASHAs (N=146)**

**1.5 DISCUSSION**

The study aimed to assess the knowledge and practices of ASHAs of Bahadurpur block in provision of HBNC services. Though the knowledge level was good but they were less efficient when it comes to practicing the services. Most of the ASHAs carry weighing machine and thermometer during home visit but leave other important items like medicine, dressing materials etc. which affected the provision of services. Only half of the ASHAs advised mother regarding vaccination and maintenance of temperature through Kangaroo Mother Care. During home visits, apart from measuring weight and temperature, rest other signs of the new born were examined by less than half of the ASHAs only. Many other factors and challenges also influenced the provision of HBNC services. About 30 percent of the ASHAs had some or the other challenges out of which receiving of late incentives was the major issue. About one third (34.2 percent) of total ASHAs did not receive checklist which had an impact on provision of services. However, majority (85.6%) of ASHAs had good perception regarding the services. Ignorance of instructions by decision makers in the family also added to the woes of newborn care. Similarly, a study on New born care practices and home-based postnatal new born care programme Mewat, Haryana, India, 2013 by **Latika Nath Sinha et.al** showed that mothers adopted a few safe practices; however, there were gaps in the adoption of several safe practices despite being informed. ASHAs seemed to have played a key role in facilitating the adoption of safe practices; however, the quality of services could be further improved. There was a need for innovative training strategies to improve the ASHAs' skills and a need for engaging communities including elder family members and TBAs in counselling sessions to increase community acceptance of safe practices. <sup>4</sup> A Study on Knowledge and skills of Female Health Workers regarding maternal care under RCH programme by **Kaushik Lodhiya K et al.** suggested that the knowledge, practice & skills of HW-F in regards to ANC & PNC services was a very crucial aspects of maternal care for prevention of maternal mortality & morbidity. Therefore, in service periodical sensitization & advocacy workshops & trainings of these HWs are recommended. Supervisory cadres are required to brace themselves for stricter & stringent vigilance & supervision of the functioning of HW-Fs. Encouraging research on health care system for proper implementation of national health programs is necessary. <sup>5</sup>

**1.6 CONCLUSION**

Based on the findings of the present study, this can be concluded that ensuring refresher training, adequate supplies of checklists to ASHAs, regular monitoring of filled checklist and on time payment of incentives can make provision of HBNC effective and thus help achieving the goal of reduction of neonatal mortality.

**1.7 ACKNOWLEDGEMENTS**

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