Study to Assess Awareness, Knowledge and Skills of ASHA Regarding Home Based Newborn Care (HBNC) in Lakhimpur Kheri District, Uttar Pradesh

By

Divyanshi Tiwari

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2018-2020

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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 heath care in India, to make home visits to promote essential newborn care, identify illness and refer infants if needed. Thus the knowledge and skills 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 the awareness, knowledge and skills of ASHAs regarding the provision of HBNC services. The study covered 286 ASHAs of 4 blocks i.e., Phardhan, Phoolbehed, Isanagar and Nighasan blocks of Lakhimpur Kheri district in Uttar Pradesh, India. Data was collected by using questionnaire, which was distributed among the ASHAs with the help of Asha Sangini Mentors (ASMs). The data indicated that the awareness regarding HBNC is good but they become less efficient when it comes to various skills such as activities to be conducted during home visit and identification of danger signs of the mother and newborn. Lack of regular monitoring and supervision might have affected the provision of services. Refresher training and regular monitoring can make the HBNC services more effective and thus help in achieving the goal of reduction of neonatal mortality.

Acknowledgement

I started my dissertation with a vision in my mind so as to be able to learn about the practical aspects of healthcare delivery system in a more detailed manner. Hereby, I take this opportunity to express my deep sense of gratitude to all those who have been instrumental in successful completion of my dissertation.

First and foremost I would like to thank my prestigious institution and faculty members for making me capable to work in such a reputed organisation. I would like to thank INDIA HEALTH ACTION TRUST – IHAT, Lucknow for providing me with an opportunity to work with them where I gained basic knowledge of working of health functionaries.

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Words are inadequate to thank those with whom I interacted during the dissertation to learn about the health system from grass-root to state level and those who were a part of my project without whose unconditional cooperation my study would have not been completed successfully.

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Divyanshi Tiwari

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ACRONYMS/ABBREVIATIONS

ASHA	**Accredited Social Health Activist**
ANC	**Antenatal Check-up**
ANM	**Auxiliary Nurse Midwife**
ASM	**ASHA Sangini Mentor**
DCS	**District community Specialist**
HBNC	**Home Based Newborn Care**
IHAT	**India Health Action Trust**
IEC	**Information Education and Communication**
IMR	**Infant Mortality Rate**
IFA	**Iron Folic Acid**
KMC	**Kangaroo Mother Care**
LBW	**Low Birth Weight**
NMR	**Neonatal Mortality Rate**
NBCC	**Newborn Care Corner**
NBSU	**Newborn Stabilization Unit**
ORS	**Oral Rehydration Solution**
PNC	**Postnatal Check-up**
SAPW	**Severe Anemic Pregnant Women**
SNCU	**Special Newborn Care Unit**
VHND	**Village Health and Nutrition Day**
ZCS	**Zonal Community Specialist**

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 Lakhimpur Kheri is 78 per 1000 live births whereas NMR (Neonatal Mortality Rate) is 55 per 1000 live births as per AHS (Annual Health Survey) 2012-13 which is way below national numbers (poor performing).

Thus, the provision of Home-based newborn care (HBNC) is critical for the survival of newborns. For effective promotion of 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 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.

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.

LITERATURE REVIEW

Globally, over 130 million babies are born every year, and almost 4 million die in the first four weeks of life. Presently, the infant mortality rate (IMR) for India is 47 per 1000 live births, and the neonatal mortality rate (NMR) is 32 per 1000 live births. India aims for a two-thirds reduction in IMR, from the 1990 level of 84/1000 live births to 28/1000 live births by 2015. The NMR contributes to 68% of the IMR, and any further reduction in IMR can only come from a decline in NMR. The Accredited Social Health Activist (ASHA) represents the pivotal part in the NRHM, where the principal program of the government to achieve the health related MDG such as infant mortality rate, maternal mortality rate; and improvement of nutrition status of children and mothers. Home based newborn care to reduce newborn mortality and morbidity" for reform option HBNC, SEARCH, Gadchiroli, Maharashtra. It was observed that health service delivery in the region was so poor that in the area where around 54% of the neonates needed medical attentions, only 2.6% were able to receive medical attention and 0.4% were managed to get hospitalized. Achievements are reflected in Neonatal mortality rate: 70 percent reduction in 2001-03 as compared to control area. (Sharad B. Pandit, 2016)

India has contributed immensely toward generating evidence on two key domains of newborn care: Home Based Newborn Care (HBNC) and community mobilization. In a model developed in Gadchiroli (Maharashtra) in the 1990s, a package of Interventions delivered by community health workers during home visits led to a marked decline in neonatal deaths. On the basis of this experience, the national HBNC program centered around Accredited Social Health Activists (ASHAs) was introduced in 2011, and is now the main community-level program in newborn health. Earlier in 2004, the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) program was rolled out with inclusion of home visits by Anganwadi Worker as an integral component. IMNCI has been implemented in 505 districts in 27 states and 4 union territories. A mix of Anganwadi Workers, ASHAs, auxiliary nursing midwives (ANMs) was trained. The rapid roll out of IMNCI program resulted in improving quality of newborn care at the ground field. However, since 2012 the Ministry of Health and Family Welfare decided to limit the IMNCI program to ANMs only and leaving the Anganwadi component to

the stewardship of the Integrated Child Development Services. ASHAs, the frontline workers for HBNC, receive four rounds of training using two modules. (SB Neogi, 2016)

The impact on the mother are also welcoming as it is a natural way to delay the menstrual cycle and thus creates a natural spacing between children, moreover mothers who breastfed their children are more protected against diseases like ovarian cancer and feels less sick. Breast feeding is actually a god's gift to all the women and their babies, especially if one talks of condition where the resources are few, as it is a natural method and the women need not be dependent on any external factor. But most of the time it is seen that this opportunity is not used properly, even in the present study it was found that in cases where breast feeding was done there were certain drawbacks like in-exclusive breastfeeding, discarding of colostrum. It was also found in84% of the cases respondents were reported to have been visited by ASHA's, while 18.55 % reported to have initiated breastfeeding on the advice of ASHA, 33% were reported to seek help from ASHA in case of any problem, while 17.5% were reported to have been advised to do exclusive breastfeeding by ASHA's and 16.5% were reported to gave bath to their babies after 3 days on the advice of ASHA. This shows that ASHA's are quite successful in making their impact among the respondents and they are the one who were found to be trusted by the respondents, so, the need of the hour should be to promote such ground level initiatives as the problem persists among the common and the deprived masses who are still too far from satisfactory and for their upliftment and betterment leaders like ASHA's are required who besides performing role of a mobilizer, caregiver, counselor, advisor, mediator is the one who is one from them and for them only. According to an ICMR study nearly three quarter of all neonatal deaths occur during the first week of life, the remaining 25% of deaths occur between week two to four.3 These precious lives can be saved easily through timely intervention by inculcating proper care taking practices by the family members or care taker of the baby. This "home based new born care" called as familial practice is well articulated in government policy which aimed at improving newborn survival. The key policy document that articulates this is the eleventh plan document (2007-2012). Familial practices of new born refer to the usual care practices carried out by mother as well as their members without knowing whether this practices is helpful or injurious to child health for instance giving pre-lacteal, giving first bath to baby before completing six day, applying anything umbilicus and keeping knife and match box near new born babies. Further it is extended to describe looking over other newborn care practices like feeding practices. (Siddiqui)

There has been a decline in the childhood and neonatal mortality parameters of India over the years, but this reduction is comparatively slower in the neonatal group. In an attempt to address the issue of high neonatal mortality, Government of India released Home Based Newborn Care (HBNC) guidelines in 2011 and ASHA workers were mobilized for providing maternal and immediate newborn care. The guidelines were revised in 2014 to include expectations for ASHA to make timely institutional referrals during pregnancy and home visits to promote and provide essential newborn care, identify illness, and refer infants, if needed. ASHA workers were trained in these specific competencies of maternal and newborn healthcare using modules 6 and 7 of National Rural Health Mission (NRHM), The ASHA workers were also evaluated on their performance of the following skills: hand-washing, weight-recording, temperature-recording, kangaroo mother care (KMC) positioning, and bag and mask ventilation (BMV). The checklists used for hand- washing, measuring temperature, and weighing the baby were as per training module 6 of NRHM. The checklists for BMV and KMC were prepared according to the Navjat Shishu Suraksha Karayakam (NSSK) manual. (Bansal, 2016)

Study Objective

'To assess the awareness, knowledge and skills of ASHA regarding Home Based Newborn Care in Lakhimpur Kheri District, Uttar Pradesh'

METHODOLOGY

Research Question

Do the ASHAs have adequate knowledge and skills regarding the HBNC Programme for which they are the main point of contact for the beneficiaries?

Research Design

A **Descriptive Cross-Sectional Study** was conducted from 14th February,2020 to 14th May,2020

Study Setting

This study was conducted in the rural areas of 4 blocks, including Phardhan, Phoolbehed, Isanagar and nighasan of Lakhimpur Kheri District.

Study Population

The ASHAs in the 4 blocks of Lakhimpur Kheri who have undergone HBNC training/ Module 6-7 training were selected as the respondents of the study

Inclusion Criteria – All the ASHAs working in these 4 blocks and have received the training of HBNC

Exclusion Criteria – New ASHAs that are appointed recently and have not received the training regarding HBNC

Sample Size

Out of the total 1107 ASHAs in the 4 blocks, 286 ASHAs were selected randomly from the blocks, using following sample size formula.

$$\text{Sample size} = \frac{\frac{z^2 \times p\,(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p\,(1-p)}{e^2 N}\right)}$$

$$\text{Sample size} = \frac{\frac{(1.96)^2\,(0.5)\,(0.5)}{(0.05)^2}}{\frac{(1.96)^2\,(0.5)\,(0.5)}{(0.05)^2 \times 1107}}$$

$$= \frac{384.16}{1.347028} = 285.19$$

Sample size was taken at 95% Confidence interval and 5% margin of error.

Sampling Technique

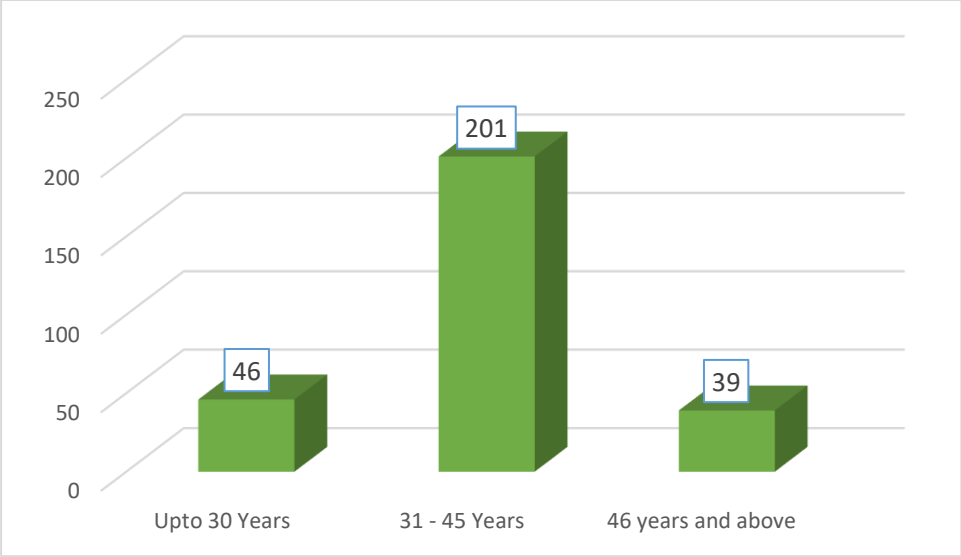
Systematic Random Sampling was used to select the respondents for this study. There were total of 10 ASMs, each having 5 ASHA Sanginis and Sanginis further having 25-26 ASHAs. Therefore, 5-6 ASHAs from each Sangini were randomly selected by the ASMs, leading to final sample size of 286. The Primary data was collected using a questionnaire consisting of both open and close ended questions related to HBNC. The responses were filled by the ASHAs. The data was scrutinized before entering and analyzed using MS Excel.

Overall Findings

Socio-demographic characteristics of respondents

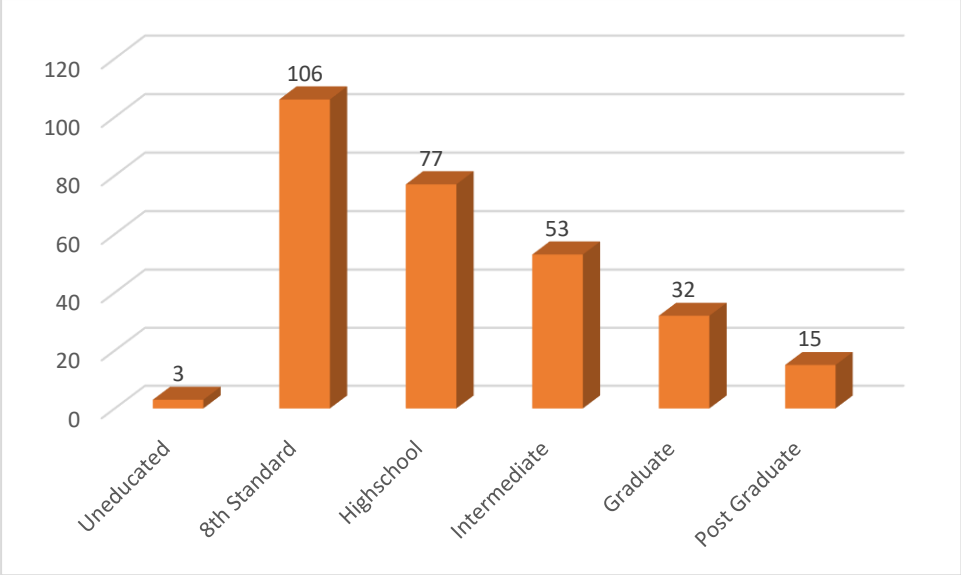
Out of 286 ASHAs about 16 % (46) ASHAs were in the age group of upto 30 Years. More than two-third, 70% (201) ASHAs were in the age group 31 – 45 Years and rest 14% (39) ASHAs fell in the age group 46 Years and above.

Figure 1. Age of Respondents



More than one-third (37%) of the ASHAs were educated till 8th standard, whereas 27 Percent ASHAs mentioned education level as high school. Some ASHAs completed education till 12th standard (19 Percent) and few (11 Percent) were graduated. The ASHAs who had completed their studies till post-graduation were not much (5 Percent). Surprisingly, it was observed that 3 ASHAs were illiterate.

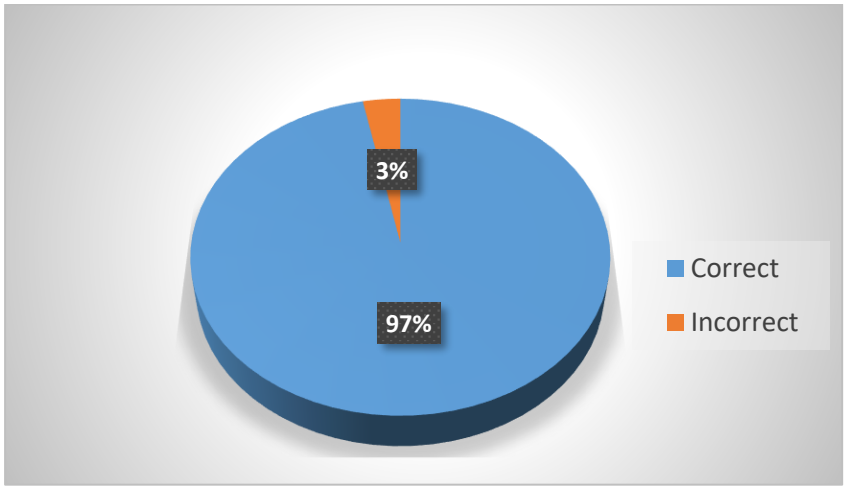
Figure 2. Education Status



Knowledge and awareness among the ASHAs

A majority ASHAs (97%) found aware about the full form of HBNC i.e. Home-Based Newborn Also, all 286 ASHAs mentioned correctly that the provider of the HBNC services are ASHAs themselves.

Figure 3: Awareness about full form of HBNC

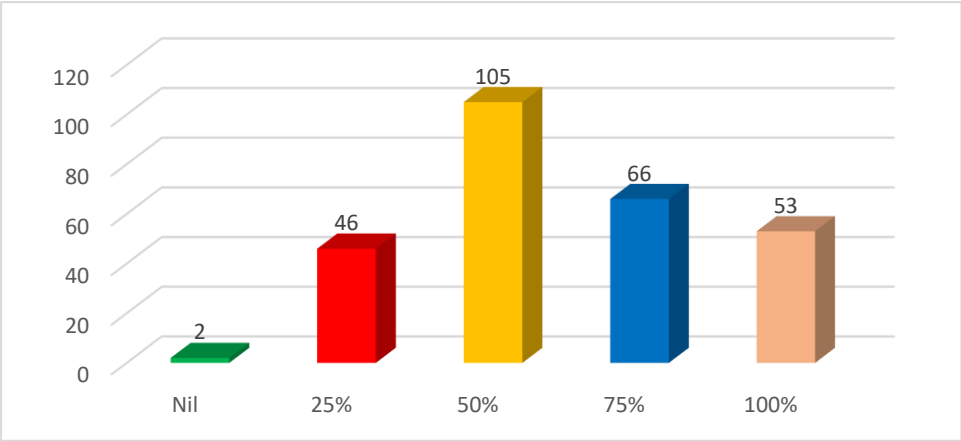


There are 4 objectives of HBNC services including,

1. Reduction of Neonatal Mortality and morbidity
2. Provide complete newborn care and prevention of complication
3. Early detection and care of preterm and Low birth weight child
4. Support family and skill counselling to the mother

A little less than two-fifth ASHAs (37 Percent), had knowledge about the objectives of HBNC for two indicators namely they knew about reduction of neonatal mortality and to provide complete newborn care and prevention of complication. On the contrary less than one-fifth (19%) found having knowledge regarding all the four indicators pertaining to HBNC services.

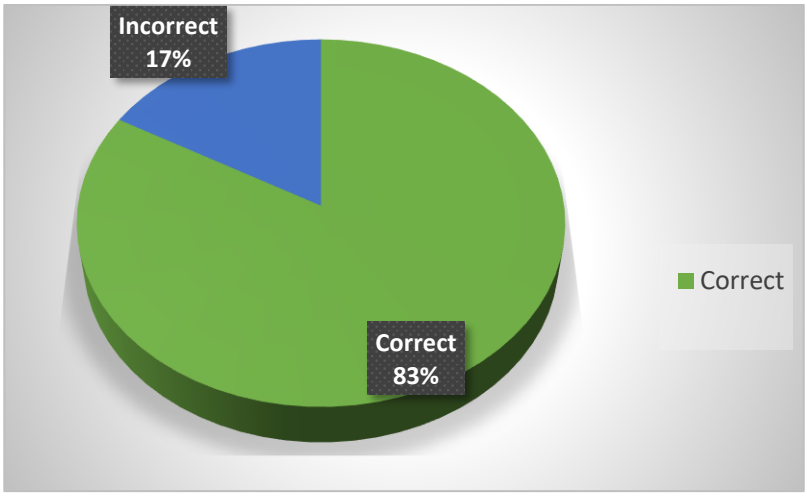
Figure 4: Knowledge about objectives of HBNC



The interesting point that came to the notice from analysis was that all ASHAs found aware about the number of home visits related to Institutional Delivery i.e. 6 visits (3,7,14,21,28,42 day from the day of discharge) and Home delivery i.e. 7 visits (1,3,7,14,21,28,.42 day from the day of discharge).

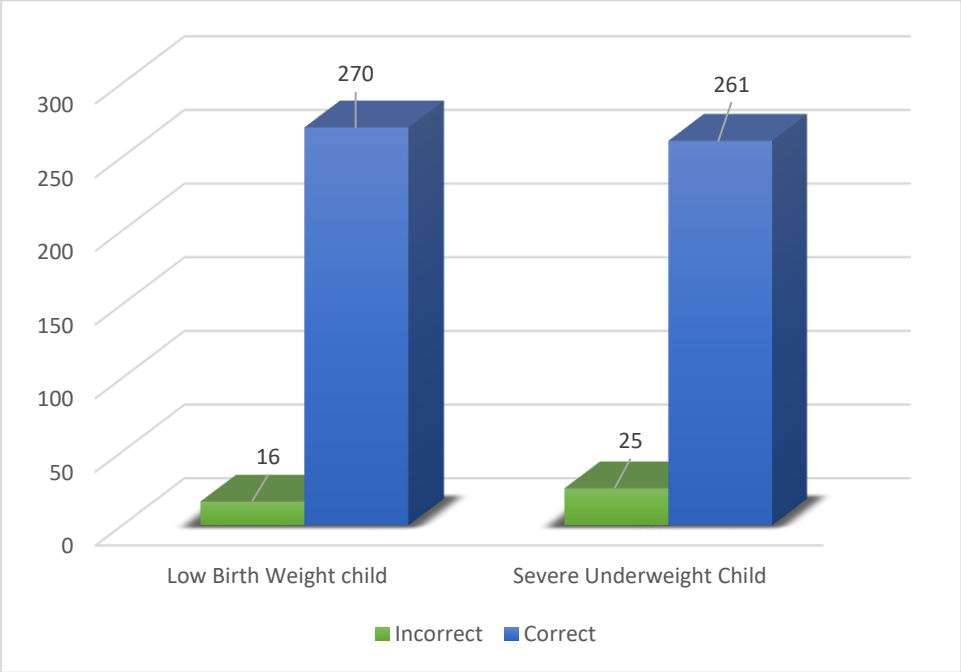
Among 286 ASHAs, 238 ASHAs (83 Percent), correctly mentioned that early initiation of breast feeding and the time within which it should be provided to the newborn after birth i.e. Within 1 hour of birth..

Figure 5: Early Initiation of Breast Feeding



When the information regarding the low birth weight i.e., 2500 gm and severe underweight i.e., 1800 gm was asked from the ASHAs, most of the ASHAs (94 Percent) mentioned correctly about the low-birth weight and (91 Percent) mentioned correctly about the severe underweight.

Figure 6: Knowledge regarding Low birth weight and Severe underweight



The knowledge regarding the incentive to be given to the ASHAs for providing HBNC services i.e. 250 Rs. was mentioned correctly by all the respondents.

Skills of the ASHAs during the HBNC Visit

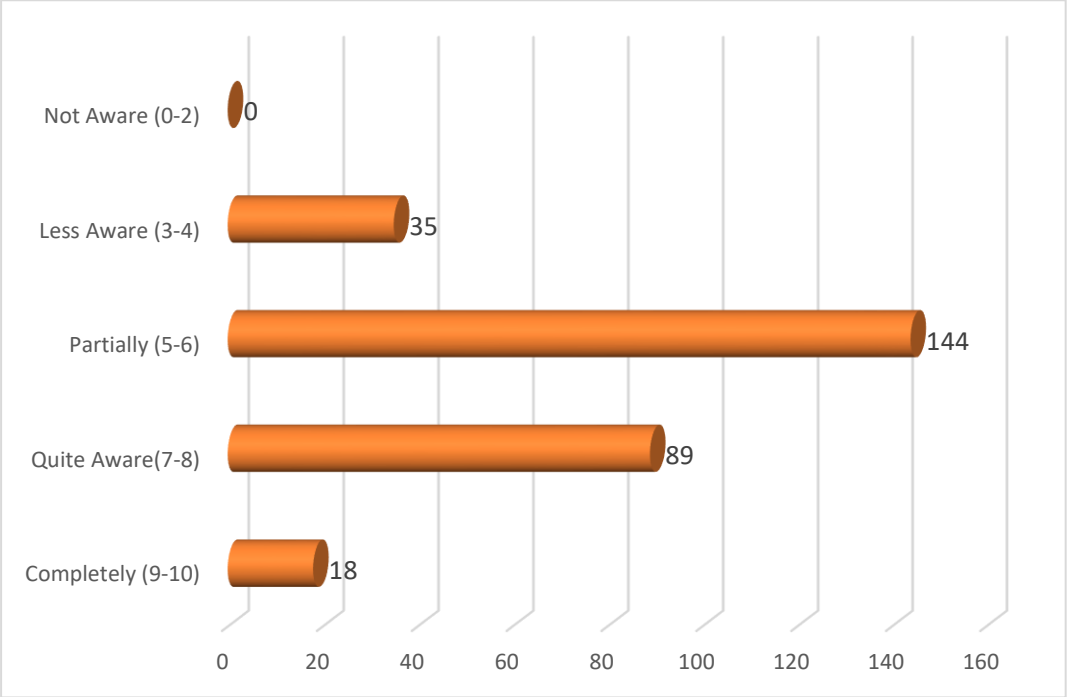
There are various activities to be conducted during the HBNC visit by the ASHA as following,

- Hand washing practice by the ASHA and the mother
- Weighing of the newborn
- Recording the temperature of the newborn using thermometer
- Counting of the breath of newborn (for how long?)
- Baby wrapping in blanket to keep the baby warm
- To counsel the mother about proper breast feeding
- To examine eye, cord and skin of the newborn for care
- To examine the danger sign of mother and child
- Referral in case of complication
- Counselling on family planning

Around half (50 Percent) of the ASHAs were found partially skilled about these activities , 31 Percent of the ASHAs were able to perform 8 activities in skills regarding the activities and only 6 Percent were completely skilled about all the activities to be conducted during the visit. Although there was no such ASHA who found completely unskilled, still 12 Percent ASHAs were able to perform only 4 activities and were skilled regarding the activities. None of the ASHA found unaware about what to perform during home visit pertaining to HBNC. Further, the analysis suggests, 35 ASHAs were less aware regarding the same. More than half (50 percent) ASHAs were

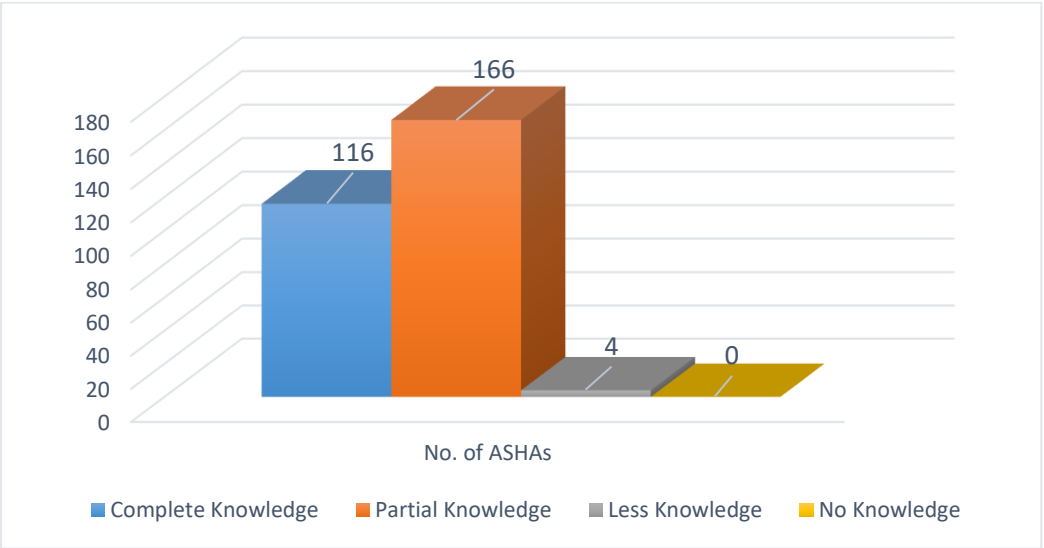
partially aware where questions related to activities perform during home visit with regard to HBNC was asked.

Figure 7: Activities to be conducted duiring HBNC



When it comes to the knowledge regarding basic equipment to be carried during the visit, most of the ASHAs (58 Percent) carried weighing scale and thermometer and blanket with them. 41 Percent of the ASHAs carried timer also along with the other equipment. Only few (1 Percent) of the ASHAs did not carry even this basic quipment to the field visit.

Figure 8: Equipment to be carried during HBNC



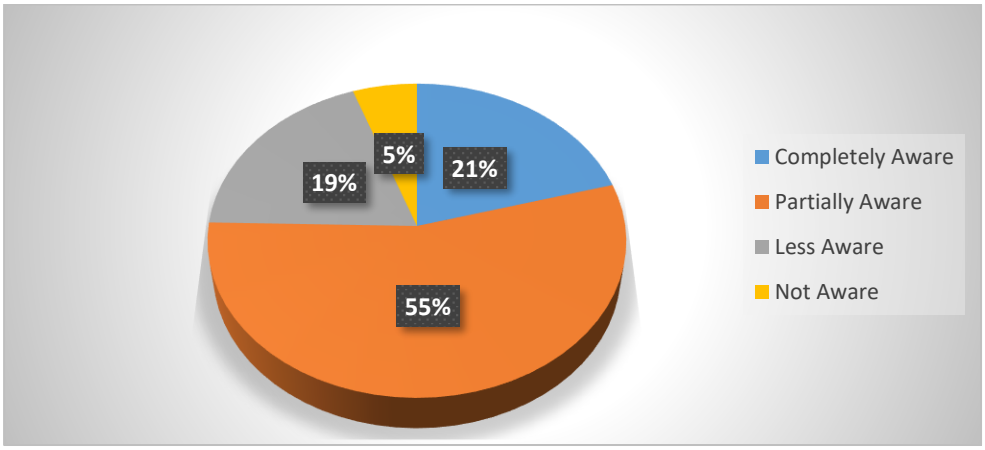
Danger signs of the mother are:

- Excessive bleeding
- Smelling fluid discharge/stomach pain/swelling in vagina
- Weakness/ swelling in body
- Anxiety, dizziness, seizures
- Breast infection (Redness, Pain and tumour)
- Fever
- Change in mental state

These danger signs are to be examined by the ASHAs during the home visit.

About 21 Percent ASHAs are aware about the danger signs of mother correctly and more than half of the ASHAs (55 Percent), mentioned about excessive bleeding, smelling fluid discharge, weakness an fever, whereas 19 Percent ASHAs are less capable of examining the danger signs and 5 Percent do not examine the danger signs of mother.

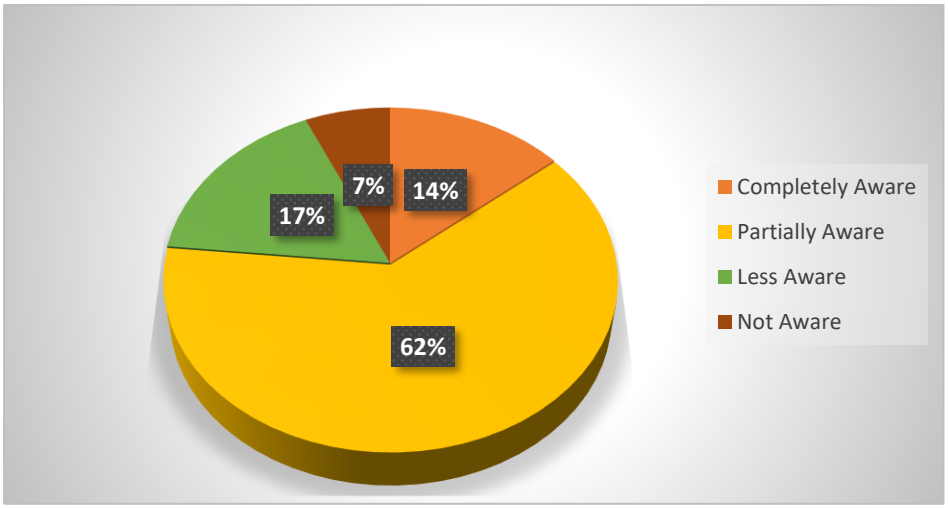
Figure 9: Danger Signs of the Mother



- Similarly, the danger signs of child are examined during the visit including:
  - Eye, cord and skin infection
  - Vomiting and difficulty in breast feeding
  - Heavy and improper breathing
  - Temperature less than 95.9 and more than 99 degree Fahrenheit

  About 14 Percent ASHAs are aware of examining the danger signs of child, 62 Percent ASHAs partially aware in examining danger signs of child whereas 17 Percent are less capable to examine danger signs and rest 7 Percent do not examine the danger signs of newborn child.

Figure 10: Danger Signs of a Child



All the ASHAs found having knowledge about Kangaroo Mother Care and the procedure of providing the Kangaroo Mother care to the low birth weight newborn. Also, they used to counsel mothers about the benefits of providing Kangaroo Mother Care

All the ASHAs of the district have received the HBNC checklist and they fill the checklist during the visit.

Conclusion

The study aimed to study the knowledge and skills of ASHAs of Lakhimpur Kheri in provision of HBNC services. Though the understanding about HBNC, the provider of the services, Number of visits to be conducted in case of Institutional delivery and Home delivery, ASHA incentive to be given to them, Kangaroo Mother Care and Checklist was appropriate among them, but they were having less knowledge when it comes to skills such as early initiation of breast feeding, Low Birth weight child and severe underweight child, activities to be conducted during the visit and examining of danger signs of mother and child.

Based on the findings of the study, this can be concluded that ensuring refresher training, regular monitoring and supervision can make the provision of HBNC more effective and thus help in achieving the goal of reduction of neonatal mortality.

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Annexure

एचबीएनसी (HBNC) Questionnaire

1. आशा नाम …….. दिनांक……
2. ब्लॉक का नाम ……..
3. आशा की आयु ……
4. आपने किस कक्षा (Class) तक पढ़ाई की है? ……
5. विवाहित या अविवाहित? ……
6. HBNC का पूर्ण रूप (Full Form) क्या है?

   ……
7. एचबीएनसी (HBNC) सेवाएं कौन देता है? ……
8. HBNC सेवाओं के उद्देश्य क्या हैं?
   1) ……
   2) ……
   3) ……
   4) ……
9. संस्थागत प्रसव के मामले में यात्राओं की संख्या कितनी है?(Number of visits in Institutional Delivery) ……
10. होम डिलीवरी के मामले में यात्राओं की संख्या कितनी है? (Number of visits in Home Delivery) ……
11. ब्रेस्ट फीडिंग की शुरुआती दीक्षा (Early Initiation of Breast Feeding) से आप क्या समझते हैं और मां को ब्रेस्ट फीडिंग करवाना कब शुरू करना चाहिए?

    ……
    ……
    ……

12. नवजात शिशु को कम वजन (Low birth weight) और गंभीर कम वजन के रूप में कब माना जाता है? (वजन लिखें) .....

13. नवजात शिशुओं को HBNC सेवाएं प्रदान करने के लिए ASHAs को कितना पैसा दिया जाता है? .....

14. एचबीएनसी यात्रा के दौरान क्या क्या गतिविधियाँ की जाती हैं?

1) .....।
2) .....।
3) .....।
4) .....।
5) .....।
6) .....।
7) .....।
8) .....।
9) .....।
10) .....।

15. नवजात शिशु की यात्रा (HBNC Visit) के दौरान किन चीजों को ले जाना होता है?

1) ....
2) .....
3) .....
4) .....
5) .....

16. माँ के खतरे के लक्षण क्या हैं (Danger Signs)?

1) .....
2) .....
3) .....
4) .....
5) .....

17. बच्चे के खतरे के लक्षण क्या हैं(Danger Signs)?

1) .....
2) .....
3) .....
4) .....
5) .....

18. कंगारू मदर केयर (KMC) से आप क्या समझते हैं?

.....

.....

19. कम जन्म के नवजात शिशु को कंगारू मदर केयर (KMC) कैसे दिया जाता है?

.....

.....

.....

20. क्या आपको HBNC चेकलिस्ट मिली है? .....

21. क्या आप HBNC चेकलिस्ट भरते हैं? .....

----------X----------x----------