

ROLE AND KNOWLEDGE OF ASHAs IN DELIVERING MESSAGES ON NEWBORN CARE TO PREGNANT WOMEN IN UTTAR PRADESH, INDIA

Dr. Tridibesh Tripathy

Public Health & Homoeopathic Expert, Subject Expert, Master of Public Health
(community medicine) course, Lucknow university

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Abstract:

When ASHAs were introduced in NRHM in 2005, one of their primary mandates were to visit homes of pregnant women in their last trimester to give messages on newborn care. The first program regarding the counselling and delivering of relevant messages on newborn care were envisaged under the Comprehensive Child Survival Program (CCSP) way back in 2008 in Uttar Pradesh. Since then, tracking of all the deliveries and the related messages given by ASHAs on ANC and birth preparedness to mothers during pregnancy are an integral part of the work of ASHAs in all the primary health care programs operated by the NHM in UP.

The current study explores some of the crucial variables of the targeted activities of the ASHAs in type of message delivery on newborn care in four districts of UP. Through this profile, the content and type of messages given by ASHAs in their coverage area is tracked for pregnant women.

The relevance of the study assumes significance as data on the details of activities like the content, timing and quality of messages delivered by ASHAs during pregnancy on newborn care through home visits as per the HBNC guidelines are usually not available in various studies available in the public domain.

A total of four districts of Uttar Pradesh were selected using purposive sampling for the study and the data collection was conducted in the selected villages of the ASHAs. The villages were selected on the basis of the selection of the ASHAs. Data collection were done in the respective districts using a pre-tested structured questionnaire with both close-ended and open-ended questions. In addition, in-depth interviews were also conducted amongst the ASHAs and a total 250 respondents had participated in the study.

The content of message deliveries by ASHAs in the 4 districts in their catchment area was assessed. Most of the ASHAs in all the districts except Gonda gave all the messages on newborn care to the pregnant mothers. This shows that as per the ASHAs, the newborn care message was better delivered in all the four districts. Similarly, all the mothers received the most critical gender related message on newborn care. This reflects the urgent need to reorient ASHAs of all the districts of the state on the essential newborn care messages. The structured mentoring and coaching approach can be applied at both levels i.e. onsite or in-field and at the facility levels. The supportive supervision structure of ASHA Sanginis, ANMs and Medical Officers can be catalyzed for better adherence on delivery of the content, timing and quality of messages on newborn care to the prospective and lactating mothers in the community. The key aspect is that the process should start from the last trimester of each pregnancy.

Key words: ASHA, CCSP, Sanginis, Newborn care, Gender

***Corresponding Author: Tridibesh Tripathy** Public Health & Homoeopathic Expert, Subject Expert, Master of Public Health (community medicine) course, Lucknow university

Introduction:

The current study focused on the role and performance of ASHAs (Accredited Social Health Activist) regarding tracking of newborn care message deliveries by ASHAs to mothers during antenatal stages. ASHAs are supposed to track all the deliveries of the pregnant women in their area, visit all the would-be mothers in their area as a prioritized activity both for institutional and home deliveries. These targets were developed by the Government of UP on the lines of HBNC guidelines provided by GOI. In UP, the delivery tracking and home visits to newborns by ASHAs started with the CCSP in 2008 operated through the National Rural Health Mission (NRHM) that is currently operational in 18 states of India as HBNC. Uttar Pradesh is one such state. The aspects of newborn care messages covered here are both for the pregnant women. In a way, it examines the planning and using the data in the planning for implementation of home based newborn care by ASHAs. The study also explores the role of ASHA in addressing gender issue while delivering these messages so that both the pregnant women and family members are sensitized to take equal care of the unborn girl or boy child. The study was done in four selected districts in Uttar Pradesh (UP) and the reference period was 3 months preceding the survey.

Background of ASHAs:

The ASHAs emerged in India's public health system during the launch of NRHM in 2005 in the state of Uttar Pradesh (GOI, 2005). The ASHAs were in fact inducted to NRHM with the primary aim to roll out the JSY component of NRHM (GOI, 2005).

A study on evaluation of ASHAs in 2013 in UP reflects that 52.7% of pregnant women were registered in first trimester of pregnancy. 97.4% of pregnant women were registered for ANC by ASHAs. 98.2% pregnant women got support from ASHAs. 90.4% of the pregnant women were escorted for delivery by ASHAs and 97.06% of pregnant women were escorted in case of complications to Government health facility (GOUP, CCSP evaluation report, Vimarsh, 2013). The performance of ASHAs in UP was also done in another study. As per the study, 98% of

ASHAs register pregnant women, average number of pregnant women registered by each ASHAs in UP was 22. Among the registered pregnant women, 32% of deliveries were home deliveries. 93% of deliveries of health facilities were accompanied by ASHAs and 71% of home deliveries were attended by each ASHA (Bajpai N, Dholakia R, 2011).

As per another project operated in UP from 2006 to 2012, the final results mention that the percentage of mothers reporting on the second visit to their newborns by ASHAs increased from 21% in 2006 to 60% in 2012. Similarly, the third visit increased from 8% to 40% (COP report, Vistaar Project, 2013). As per the report, the first visit refers to a visit by a doctor or ANM and not ASHA.

The above three studies do not reflect on the performance of ASHAs with respect to their targets for their catchment area nor to the content and quality of message delivery on newborn care. The current study has the quality and content for each of the variables on newborn care used in the study. This study done in 2017 examines the profile of the timing and content of newborn care related messages in the coverage area of ASHA. It further examines the role of gender in the delivery of messages as the role of ASHAs are seen for both boys and girls. The data reveals if the ASHA has asked the mother to take equal care of boy or girl both in pregnancy stage of the mother and in the first month period after delivery. Through the scrutiny of these message delivery, it also shows whether the ASHAs have visited the houses of all the pregnant women and newborns who are to be escorted for these deliveries to institutions.

Gender issues also contributed to neonatal mortality as care of the baby girl and baby boy differs and the baby girl was even discriminated in the womb. Females were under represented among births and over represented among infants that die (Kishore and Gupta, 2009). Gender issues were further reinforced in the declination rate of IMR in India. The annual rate of IMR decline from 2007 to 2012 was also higher for males which are 5.9% compared to 4.8% for females (SRS, 2013). A study conducted in UP

demonstrated that households with female newborns used cheaper public health care provider whereas those with males prefer to use private providers who are perceived to deliver more satisfactory care (Willis JR. et. al, 2009). The current study included areas of caring for baby boy and baby girl to see whether ASHAs gave the message regarding equal care or not.

The following table gives a glance of the data on newborn care in the state of Uttar Pradesh and in the four study districts as per the NFHS 4 survey. The study does not distinguish between boy or girl delivered at home who were taken to a health facility within a day of birth. However, this indicator is performed very poorly in all the four districts. From this we can assume that this message was not planned and not given to mothers during their pregnancy. The colostrum feeding indicator seems to have been planned and that's why is better performed. The current study focuses on the ASHAs but NFHS has clubbed the ASHAs in the other personnel category. Thus, the study assumes significance as it deals with the ASHAs who are about a million across the nation (GOI, 2019). The ASHA scheme is operational across the nation except Goa, Puducherry and Chandigarh (GOI, 2019).

Table 1: Data related to newborn care in NFHS 4, 2015-16

Newborn care indicators in percentage	State level (UP)	Band a distr ict	Baraba nki distr ict	Gond a distr ict	Saharan pur distr ict
Children born at home who were taken to a health facility within 24 hours of birth	0.8	1.8	2.2	0.0	1.4
Children under 3 years of age breastfed within an hour of birth	25.2	41.0	34.3	13.3	22.3
Children who received a health check-up after birth from doctor/LHV/ANM/ Midwife or other health personnel within 2 days of birth	24.4	15.5	12.3	5.8	59.8

Research Methodology:

Using purposive sampling technique, four districts were chosen from the four different economic regions of UP, namely Central, Eastern, Western and Bundelkhand. Further, the Government of UP in 2009 categorized the districts as per their development status using a composition of 36 indicators. Purposefully, the high developed district chosen for the study is Saharanpur from the western region, the medium developed district chosen for the study is Barabanki from the central region, the low developed district chosen for the study is Gonda from the eastern region and the very low developed district chosen for the study is Banda from the Bundelkhand region (GOUP, 2009).

In the next step, purposefully two blocks were selected from each of the district and all the ASHAs in these blocks were chosen as the universe for the study. From the list of all the ASHAs in each of the two blocks, 31 ASHAs were chosen randomly from each block for the study. In this way, 62 ASHAs were chosen for the study from each of the districts. In Gonda district, 64 ASHAs were selected to make the total number of ASHAs for the study to 250.

Data analysis:

The data was analyzed using SPSS software to calculate the percentage of mothers covered by ASHAs. The pregnant mothers include all those who planned for deliveries that covers both institutional and home deliveries. It also deciphered the home-based newborn care messages given to mothers who were visited by ASHAs. The content and timing of the messages were also analyzed. The analysis also saw the messages through the gender lens as mothers were told to care equally for the unborn boy or girl. The qualitative data related to the details of the contents of the messages given during home visits to newborns and deliveries was seen against the prescribed guidelines for ASHAs by GOI regarding the content in the prescribed training modules of ASHAs.

Research tool:

The ASHAs were interviewed using an in-depth, open-ended interview schedule that had five

sections which included a section on variables on work done by ASHAs through home visits to newborns, escorting deliveries to institutions, number of home deliveries and number of newborns visited. The current study is related to the fourth section of the research tool. These activities were also seen against the targets that should be achieved by the ASHAs to track the number of deliveries and visits to the houses of number of newborns in the last 3 months preceding the survey.

Results and discussions:

This section has one table followed by the descriptive and analytical statistics related to the data in the table. The analytical statistics also has a figure that shows the mean level of knowledge among the ASHAs across the four districts.

Table 2- given by ASHAs on newborn care to pregnant women

Number of ASHAs surveyed (n= 250)	Banda (n=62)	Barabanki (n=62)	Gonda (n=64)	Saharanpur (n=62)
Percentage of ASHAs who tell about the following messages to pregnant mothers about newborn care				
Initiate breast feeding within an hour of birth	100	100	100	100
Benefits of colostrum feeding	100	100	93.7	93.5
Feed only breast milk to the newborn up to 6 months	100	100	100	100
Do not apply anything on the cord	100	100	100	100
Dry and wrap the newborn immediately after birth	100	100	98.4	100
Continue to keep the newborn warm	100	98.3	98.4	100
Do not bathe the newborn till 7 days	100	100	100	100
Weighing the newborn	100	100	98.4	100
Getting the newborn immunized (OPV and BCG)	100	100	100	100
Caring equally for boys or girls	100	100	98.4	100

The current section was related to activities by ASHAs during home visits of the research tool. The options in these related questions were related to newborn care. While collecting response, the research tool had the facility to read out the options to ASHAs. When the messages were read out to the ASHAs asking them whether they gave these newborn care messages, more than 98% or even for most of the messages 100% of ASHAs across the 4 districts replied that they give these messages to pregnant women. In comparison, when they were only probed through another question in the research tool, it was seen that except Saharanpur district, in all other 3 districts, less percentage of ASHAs gave the message during home visits. This reflected that the message dissemination during home visits was poor in 3 districts except Saharanpur.

The table below gives the descriptive statistics that displays the mean, standard deviation, standard error and the confidence interval for mean. The table showed that the awareness level in Gonda district was lowest among the ASHAs of the district.

Table 2.1.0

Name of districts	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean
					Lower Bound
1 Banda	62	10.0000	.00000	.00000	10.0000
2 Barabanki	62	10.0000	.00000	.00000	10.0000
3 Gonda	64	9.8750	.48795	.06099	9.7531
4 Saharanpur	62	10.0000	.00000	.00000	10.0000
Total	250	9.9680	.25145	.01590	9.9367

The table below gives the minimum and maximum values for each district for the indicators mentioned in table 2. It showed that the awareness level of ASHAs in Gonda district was lowest among the four districts.

Table 2.1.1

Name of districts	95% Confidence Interval for Mean	Minimum	Maximum
	Upper Bound		
1 Banda	10.0000	10.00	10.00
2 Barabanki	10.0000	10.00	10.00
3 Gonda	9.9969	7.00	10.00
4 Saharanpur	10.0000	10.00	10.00
Total	9.9993	7.00	10.00

The table below gives the Analysis of Variance (ANOVA) values for the indicators mentioned in table 2. A one-way ANOVA was conducted to determine the awareness level among ASHAs between groups in the four districts and within groups of in each of the districts. The difference between the awareness level of groups of ASHAs in the four districts is statistically significant, $F(3, 246) = 4.067, P < 0.05$.

Table 2.1.2

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.744	3	.248	4.067	.008
Within Groups	15.000	246	.061		
Total	15.744	249			

The table below gives the descriptive statistics showing the mean difference, standard error and significance among the variables mentioned in table 2.

Table 2.1.3

Dependent Variable	(I) QA_DN	(J) QA_DN	Mean Difference (I-J)	Std. Error	Sig.
	1 Banda	2 Barabanki	.00000	.04435	1.000
		3 Gonda	.12500*	.04400	.029
		4 Saharanpur	.00000	.04435	1.000
	2 Barabanki	1 Banda	.00000	.04435	1.000
		3 Gonda	.12500*	.04400	.029
		4 Saharanpur	.00000	.04435	1.000

	Saharanpur		35	00
3 Gonda	1 Banda	-.12500*	.04400	.029
	2 Barabanki	-.12500*	.04400	.029
	4 Saharanpur	-.12500*	.04400	.029
4 Saharanpur	1 Banda	.00000	.04435	1.000
	2 Barabanki	.00000	.04435	1.000
	3 Gonda	.12500*	.04400	.029

The table below gives the lower and upper values of the variables in table 2.1.1. The table showed that the mean value of Gonda district was below the significance level of .05 and implied that the awareness level among ASHAs of Gonda district was lowest among the four districts.

Table 2.1.4

Dependent Variable	(I) QA_DN	(J) QA_DN	95% Confidence Interval	
			Lower Bound	Upper Bound
1 Banda	3 Gonda		.0080*	.2420
		4 Saharanpur	-.1180	.1180
		2 Barabanki	-.1180	.1180
2 Barabanki	1 Banda		-.1180	.1180
		3 Gonda	.0080*	.2420
		4 Saharanpur	-.1180	.1180
3 Gonda	1 Banda		-.2420*	-.0080
		2 Barabanki	-.2420*	-.0080
		4 Saharanpur	-.2420*	-.0080
4 Saharanpur	1 Banda		-.1180	.1180
		2 Barabanki	-.1180	.1180
		3 Gonda	.0080*	.2420

* The mean difference is significant at the 0.05 level.

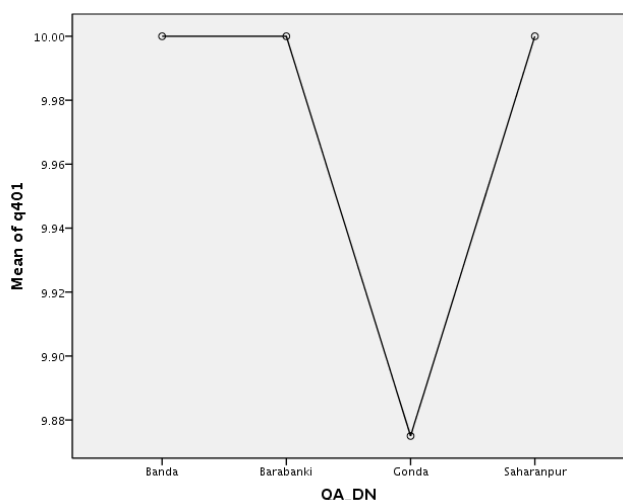


Figure 1- Mean value of the districts for the variables mentioned in table 2.1.0 is shown in the figure given above. The mean shown in the figure is related to the question 401 of the research tool used for the ASHAs. The tool had five sections and this particular question was related to the first question in the fourth section and that's why the number allotted to the question is 401.

Conclusions:

The above results showed that the average content on newborn care messages to pregnant women in their last trimester revolve around breast feeding, keeping the child warm, cord care, weighing, immunization and gender reflected issues. This was seen across all the four districts. The major problem is that the ASHAs do not compare the performance with their targets as well as the content of the message delivery. Tracking of all the pregnant women and preparing them to take care of their newborns through home based newborn care has to be planned by the ASHAs. As all the pregnant women are not tracked, deliveries are also not tracked there by all the newborns are also not tracked and that's why all the newborns are not visited by the ASHAs timely in all the districts. This is why the mothers of would be newborns do not receive the newborn care messages timely in the last trimester of pregnancy and the first month after delivery. The challenge lies in mentoring-coaching ASHAs on following up all the deliveries with the support of Sanginis (supervisors of ASHAs in UP) and that too it should be preferably

an onsite orientation i.e. during the home visits while accompanying the ASHAs. Qualitative analysis of the messages and effective delivery of these messages are the two areas that the supervisors need to focus. Message content along with the inclusion of gender issues will lead better sex ratios at birth as well. All these parameters should be worked out at the level of ASHAs so that performance is tracked regularly. Similarly, home visits are to be strengthened with the use of appropriate IEC materials that leads to adherence of the practices related to the messages.

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