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Original Research Article

A study to evaluate the knowledge of postnatal care among accredited social health activist workers in North Indian rural area

Anuradha¹, Harleen², Tarini Singh^{2*}, Debkalyan Maji³

¹CHC Basohli, Jammu, Jammu and Kashmir, India

²Department of Obstetrics and Gynaecology, SMGS and Government Medical College, Jammu, Jammu and Kashmir, India

³Command Hospital (EC), Kolkata, India

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***Correspondence:**

Dr. Tarini Singh,

E-mail: tarini_23@yahoo.com

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ABSTRACT

Background: ASHA (accredited social health activist) are the grass root level workers. Hence it is essential to study if they have adequate knowledge for delivering maternal health care services to community. The aim was to evaluate the knowledge of postnatal care among ASHA workers in North Indian rural area.

Methods: This study was conducted at Basohli block of Kathua district from December 2019 to December 2020. Information was collected from ASHAs by interview technique.

Results: 83.70% of ASHAs believed that colostrum should be given to newborn. 88.04% agreed for exclusive breast feeding for 6 months. 61.96% were in favor of more than 3 postnatal visits within 42 days of delivery. Many of them were aware of dangerous sign of postnatal mother and newborn. They were ignorant of postnatal exercises. All the ASHA were aware of purpose of immunization but only 21 knew the immunization schedule completely. All were aware of most of the available family planning methods that can be used by postnatal women.

Conclusions: It is evident from the present study that ASHA workers have good knowledge of maximum aspects of postnatal care. Further training of the ASHA should be skill based and efforts should be made to remove the obstacles they are facing.

Keywords: Postnatal care, ASHA, North India

INTRODUCTION

Globally, everyday approximately 800 women die from preventable causes related to pregnancy and childbirth. Maternal death during pregnancy and at the time of delivery contribute about 25% and 15% respectively.^{1,2} The vast majority of these deaths in high income countries is 1 in 5400 and 1 in 45 in low income countries and most could have been prevented.^{3,4}

The WHO describes the postnatal care as the most critical and most neglected phase of the life of the mother and

babies as most of the deaths occur during the postnatal period.⁵

The MMR in developing countries in 2013 is 230 per 100,000 per live births versus 16 per 100,000 live birth in developed countries.⁶ Current MMR of India is 122 deaths/100,000 live births (SRS 2015-2017). Most of the maternal deaths in under developing countries are due to inadequate health care system and family planning and pregnant women have minimal access to skilled labour and emergency care.⁷

The aim of NRHM was to provide effective health care to the rural population, mainly poor women and children residing in rural areas.⁸ To achieve this, government decided to provide a trained female ASHA to every village in the country, first introduced in rural India in 2005 and extended to urban settings in 2013.⁹ These ASHA's were directly involved in providing antenatal and postnatal services. They can play an important role in improving community health status.¹⁰

ASHA were the grass root level workers. Hence it was essential to study if they have adequate knowledge and practices for delivering maternal health care services to community.

With this rationale, the present study was carried out with an objective to evaluate the knowledge of postnatal care among ASHA's in Basohli block of district Kathua, a North Indian rural area.

METHODS

A prospective observational study was conducted at Basohli block of Kathua district from December 2019 to December 2020. The study was approved by institutional ethics committee. The different PHCs under the said block hospital were visited. Knowledge regarding postnatal care they used to provide to dependent clientele were collected from ASHA worker. All ASHA worker of the dependent PHCs who consented to participate in study were included in the study and interviewed for data collection. Data were collected and master chart were prepared for statistical analysis. A total of 92 ASHA workers were participated in the study during the study period.

RESULTS

In our study a total of 92 ASHA workers participated and were interviewed based on a self-structured questionnaire. The age of ASHA workers ranged from 21 to 65 years (Table 1). Maximum of ASHAs, that was, 36.96% belonged to age group of 31-40 years with mean age of 33.1 years. All of them were married. Most of the ASHA workers were Hindu (94.57%). 56.52% of ASHA were studied up to middle school.

Out of 92 ASHA workers 16 (17.40%) believed in pre-lacteal feeds to be given to newborns. Most commonly prescribed pre-lacteal feed was holy water whereas 77 (83.70%) of ASHAs believed in colostrum to be given to newborn as his/her first feed. They were aware of the fact that colostrum was the first breast milk and played a vital role in building the immunity of the newborn. Nearly all ASHA's 81 (88.04%) agreed for exclusive breast feeding for 6 months (Table 2). The child should be given only breast milk and nothing else for the first 6 months, whereas 7 (7.60%) and 4 (4.35%) cited 9 and 12 months for duration of exclusive breast feeding respectively.

When asked for duration of breast feeding 9 (9.78%) believed that breast feeding should be for 6 month and then supplementary food should be added to their diet. 21 (22.82%) where in the opinion of 12 month; 56 (60.87%) for 18 month and 6 (6.53%) cited that duration of breast feeding should continued till 24 months. 79 (85.87%) of ASHA believed that first breast feeding should be initiated as early as possible with in 1 hour of delivery. Most of ASHA's 90 (97.83%) were aware of covering the newborn with warm cloth.

Table 1: Age distribution and education.

Parameters	Number (n=92)	Percentage
Age (in years)		
<20	1	1.08
21-30	20	21.74
31-40	34	36.96
41-50	27	29.35
51-60	8	8.70
61-70	2	2.17
Education		
Illiterate	9	9.78
Primary school	31	33.70
High school	52	56.52
Graduate	0	0

Table 2: Knowledge of postnatal care.

Knowledge about	Number (n=92)	Percentage
Umbilical cord care		
With turmeric	0	
Triple dye	57	61.96
Clean water	9	9.78
Should be kept dry	26	28.26
Number of postnatal visits		
One	0	
Two	5	5.43
Three	30	32.61
>Three	57	61.96
Duration of breast feeding (in months)		
6	9	9.78
12	21	22.82
18	56	60.87
24	6	6.53
Duration of exclusive breast feeding (in months)		
6	81	88.04
9	7	7.60
>12	4	4.35

On asking about the number of postnatal visits, 57 (61.96%) were in favor of more than 3 postnatal visits within 42 days of delivery. 30 (32.61%) cited 3 visits and 5 (5.43%) believed that only 2 postnatal visits were sufficient within 42 days of delivery. When asked for schedule 57 (61.96%) correctly cited the schedule as first visit should take place in 24 hours of birth, 2nd visit on day

3 after birth. The third visit was on the 7th day after birth and the fourth visit was during sixth week after the birth.

57 (61.96%) of ASHA recommended triple dye for cord care. 9 (9.78%) cited that cord should be cleaned with clean water whereas 26 (28.26%) were aware of cord care correctly, they believed in keeping the cord dry.

Table 3: Danger signs in mothers.

Danger signs of PN mother	Number (n=92)	Percentage
Severe vaginal bleeding	70	76.09
Convulsion	60	65.22
Severe headache	9	9.78
Blurred vision	8	8.70
Abdominal pain	24	26.09
High fever	32	34.78
Labour >18 hrs	13	14.13
Swelling face and legs	39	42.40
Calf tenderness	3	3.26
Placenta not delivered till 30 min	6	6.52
Offensive vaginal discharge	23	25

Table 4: Danger signs in newborns.

Danger signs newborns	Number (n=92)	Percentage
Hypothermia	76	82.60
Convulsion	69	75
Lethargy	45	48.91
Cyanosis	39	42.40
Respiratory distress	68	73.91
Abdominal distension	13	14.13
Yellow discoloration of skin	60	65.22
Vomiting	24	26.09
Diarrhea	39	42.40
Decreased feeding	24	26.09
Excessive crying	23	25

When asked for dangerous sign of postnatal mother and newborn, 70 (76.09%) were aware of severe vaginal bleeding as dangerous sign (Table 3). Other most commonly cited dangerous sign were convulsion by 60 (65.22%) ASHA worker; swelling of face and feet 39 (42.40%), high fever 32 (34.78%) and offensive vaginal discharge by 23 (25%). Regarding danger signs of

newborns, ASHAs had better knowledge (Table 4). More than 50% cited hypothermia, convulsion, respiratory distress and yellow discoloration of skin as dangerous signs.

Most of the ASHA workers believed in complete rest by the postnatal mother. They were ignorant of postnatal exercises, not a single ASHA demonstrated significant benefits associated with physical activity during postnatal period.

All the ASHA 92 (100%) were aware of purpose of immunization but only 21 (22.83%) knew the immunization schedule completely. Good knowledge was important for ASHA to guide the community to get timely immunization services. Only 18 (19.57%) documented correctly that if baby was <2500 gm he/she has low birth weight. Rest 74 (80.43%) labeled 2000 gms as low birth weight. Very few 11 (11.96%) were aware of kangaroo care for low birth weight babies.

Regarding family planning methods, all ASHA were aware of most of the available family planning methods that can be used by postnatal women like CuT, injection Antara, condoms, E-pill and permanent sterilization. They were also aware that couples should be advised contraception during lactational period. They were not aware that COC were contraindicated during first six months of postnatal period. They were also not aware of correct period with which copper-T can be kept safely in situ. Minimum spacing between two children as three years was correctly cited by 72% of ASHA worker.

Only 11 (11.96%) of ASHA's were aware of progesterone only pill (POP) to be given in first six months of postnatal period. 81 (88.04%) were not aware of progesterone only pill, reason being they have not seen POP as it was not available in their hospital supply. Only 17 (18.48%) of ASHA's were in favor of the husband's participation during postnatal period.

DISCUSSION

In the present study, 92 ASHA workers were interviewed on postnatal care. Regarding the socio-demographic profile of ASHA worker mostly belonged to 31-40 years (36.96%) of age followed by 41-50 years (29.35%) followed by 21-30 years (21.74%). Reddy et al observing that 45%, 40%, 15% of ASHAs belong to 19-25, 26-30 and >30 years of age respectively.¹¹

Most of the ASHA worker (94.57%) belonged to Hindu religion, 5.43% were Muslim, supported by Ahmed et al mentioned 93% Hindu and 6.8% Muslim in their study.¹² Similarly Roy et al found that 91% were Hindu and remaining 9% included in other religions.¹³ About 9 (9.78%) were illiterate and 31 (33.70%) were educated up to primary school similar to Kumar et al who found that 16.7% were illiterate and 35.8% were educated up to primary school.¹⁴ In present study 52 (53.52%) were

studied up to middle or high school and none of them was graduate contrary to Kumar et al 35.8% and 3.3% were educated up to secondary school and graduate level respectively.¹⁴

In current study 92 (100%) ASHA worker cited that they visited her home after delivery. 62% ASHA visited her home after delivery for one time, 32.6% ASHA paid two home visits, by 5.4% ASHA, three home visits were made. A study conducted by Vimarsh consultancy in Uttar Pradesh had mentioned that all ASHA knew about postnatal home visits out of which 43% responded that number of visit should be more than 6.¹⁵

Knowledge about exclusive breast feeding was good among ASHA worker. About 81 (88.04%) responded that there should be exclusive breast feeding till six months of birth. Contrary to the study conducted by Saxena et al they found only 23% of them knew about exclusive breast feeding until 6 months after delivery.¹⁶

All the ASHA workers have knowledge of purpose of immunization whereas only 21 (22.83%) were aware of the schedule of immunization. According to study conducted Kori et al in 2015 more than 60% of ASHA has good knowledge about immunization schedule.¹⁷

About 18 (19.57%) identified that weight of baby <2500 gm as low birth weight, but 74 (80.43%) labelled 2000 gms as low birth weight. About kangaroo mother care 11 (11.96%) of ASHA worker knew that it was advised for low birth weight babies. Study conducted by Bansal et al found that knowledge of kangaroo care was 68%.¹⁸

The minimum spacing between children was correctly answered as 3 years by 72% to ASHA workers. The ASHA workers were aware of copper-T, injection Antara and permanent sterilization methods among postnatal women. But only 11 (11.96%) were aware of POP as they had not seen POP, as it was not available in their hospital. The study conducted by Ratnam et al found that 100% of ASHA worker knew the permanent and spacing method provided by government.¹⁹ The limitation of the study was small sample size and data collection was dependent on recall power of the ASHA workers during the interviews.

CONCLUSION

It is evident from the present study that ASHA workers have good knowledge of postnatal care. Although, they are lacking in knowledge on certain aspect of postnatal care especially danger sign of postnatal women and immunization. It is important that ASHA should be well aware of danger sign of postnatal care so that immediate intervention can be done. Good knowledge of immunization schedule is also important for ASHA to guide the community to get timely immunization services. Further training of the ASHA should be skill based and efforts should be made to remove the obstacles they are facing.

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