International Journal of Community Medicine and Public Health
Saxena S et al. Int J Community Med Public Health. 2017 Oct;4(10):3705-3711
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20174237

Original Research Article

Appraisal of knowledge of ASHA regarding child health services provided under NHM in Bhojipura block, District Bareilly

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Received: 27 July 2017
Revised: 08 September 2017
Accepted: 09 September 2017

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ABSTRACT

Background: One of the key strategies under the National Rural Health Mission is having a community health worker who is an Accredited Social Health Activist (ASHA) for every village with a population of 1000. These ASHA workers should preferably be female, in the 25-45 years age group and have a qualification of at least eighth class. The knowledge about health services of ASHA is crucial for the success of National Health Mission.
Methods: A cross sectional study was planned in Bhojipura village. Total 48 villages ASHAs were interviewed using predesigned semi-structured questionnaire including brief socio-demographic information of ASHA along with details of their knowledge regarding child care.
Results: Out of 64 ASHA, 25 (39.15) ASHA told that new-born babies given bath immediately after birth. 40 (62.5%) ASHA replied that nothing should be applied on umbilical stump of new-born. Mostly 62 (96.9%) ASHA knew that breastfeeding should be given first to the new-born and 61 (95.3%) ASHA were known that breastfeeding should be initiated within one hour of delivery.
Conclusions: Majority of ASHAs know their role and details of their practices in new-born and child care except bathing of new born and additional supplements.

Keywords: ASHA worker, Knowledge, Health services, NHM

INTRODUCTION

Introduction of the Child Survival and Safe Motherhood program (CSSM) in 1992 and the Reproductive and Child Health (RCH) in 1997 by the Government of India marked as a paradigm shift in the provision of maternal and child care. But these attempts could produce limited results in the absence of sustained commitments, clear implementation strategies and supportive supervision especially during the first phase of the RCH.[1]

Government of India launched the National Rural Health Mission (NRHM) on 12th April 2005, to provide accessible, accountable, affordable, effective and reliable primary health care, especially to the poor and vulnerable sections of the population.[2,3]

One of the key strategies under the NRHM is having a community health worker who is an Accredited Social Health Activist (ASHA) for every village with a population of 1000. These ASHA workers should preferably be female, in the 25-45 years age group and have a qualification of at least eighth class.[4]

The discourse on the ASHA's role centers around three typologies - ASHA as an activist, as a link worker or facilitator, and as a community level health care provider. ASHA is the first port of call for any health related demands of deprived sections of the population, who find

it difficult to access health services. She is creating awareness on health and its social determinants and mobilizes the community towards local health planning and increased utilization and accountability of the existing health services along with promoter of good health practices.[5] She will counsel women on birth preparedness, importance of institutional delivery, exclusive breastfeeding and weaning practices, immunization, contraception and prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infection (RTIs/STIs) and care of infants and young child.

One of key component of ASHA services is child care refer as preventive, curative care and makes timely referrals. ASHA workers would be able to perform their duties 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. Therefore the present study was to appraise the knowledge of ASHA workers regarding child health services provided under NHM in Bhojipura Block, District Bareilly was planned.

METHODS

Study design

A cross sectional study was planned in the field practices area of department of community medicine, Shri Ram Murti Samarak Institute of Medical Sciences,Bhojipura Bareilly. After getting the ethical committee clearance from the institute research committee and obtaining prior permission from the Medical Officer (MO), the study was conducted.

Study period

July 2014-December 2014

Sampling technique

A multi-stage sampling design with a mix of purposive and random approaches was used.

First stage: *Selection of block*

Out of the 15 blocks of Bareilly district, Bhojipura block selected purposively for the study purpose. Bhojipura block have a population of 1,91,181 (population of Town area: 20784, Rural population: 1,70,397) according to census 2011 and has 100 villages and 24 Sub centre.

Second stage: *Selection of sub centre and villages*

Out of 100 villages, all twenty four villages having sub centre were selected purposively for the study. Sub centre is the most peripheral unit for providing Reproductive and Child Health (RCH) services by ANM. Thus all Sub centre were taken for the study to appraise the services of ASHA. List of villages which were situated at the distance of 3-5 km of their respective sub-centre obtained from block and 24 villages selected randomly for the study. Thus total of 48 villages included in the study. (Map of 48 villages attached)

Third stage: *Selection of ASHA*

After selection of 48 villages, all ASHA, were interviewed of their respective villages. Visits were made to every village with the help of Medico Social Worker (MSW). Thus total of 64 ASHA were interviewed.

Data collection

Primary data were collected by face-to-face interviews from Accredited Social Health Activist (ASHA) of the respective villages. Visits were made to all selected 48 villages with the help of MSW. ASHA were interviewed at their houses only. After explaining the purpose of the study and obtaining oral consent, the study was conducted using predesigned semi-structured questionnaire including brief socio-demographic information of ASHA along with details of their knowledge regarding child care.

Data analysis

The information collected was critically analyzed and tabulated using SPSS- 20 version software. Appropriate statistical tests of significance (Logistic regression) were applied to test and validate the findings of the study.

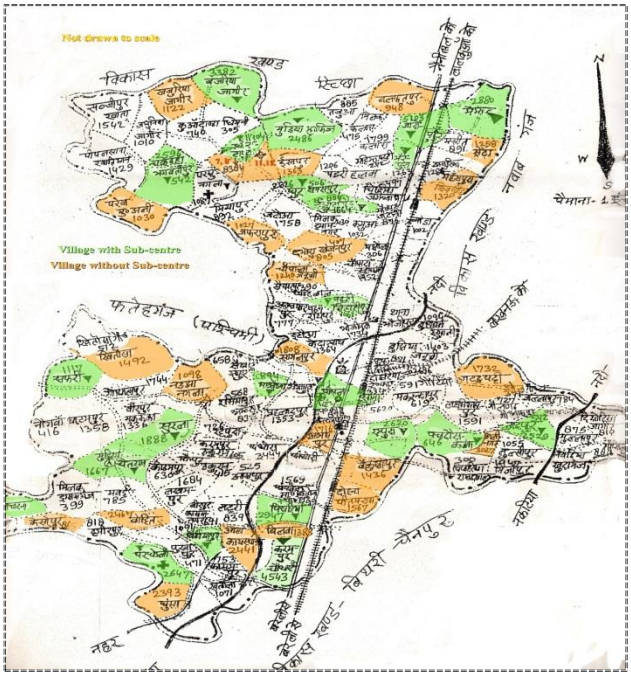

Figure 1: Map of the study area.

RESULTS

Predominantly the ASHA belonged to age group of 31-40 years 27 (42.2%), Hindu by religion 56 (87.5%), OBC caste 36 (56.3%), married 57 (89.1%), educated up to middle class 45 (70.3%), joint family 42 (65.6%) and 33 (51.6%) ASHA from social class II (Upper-middle) (Table 1).

Table 1: Distribution of ASHA according to their biosocial characteristics (n=64)

Bio-social characteristics	Number (%)
Age (years)	
21-30	24 (37.5)
31-40	27 (42.2)
41-50	11 (17.2)
50+	2 (3.1)
Religion	
Hindu	56 (87.5)
Muslim	8 (12.5)
Caste	
General	10 (15.6)
Other Backward Class (OBC)	36 (56.3)
Scheduled Caste (SC)	18 (28.1)
Marital status	
Married	57 (89.1)
Widow	7 (10.9)
Education	
Primary	10 (15.6)
Middle	45 (70.3)
High School	5 (7.8)
Intermediate	4 (6.3)
Type of Family	
Nuclear	22 (34.4)
Joint	42 (65.6)
Socio economic status (modified B.G Prasad Classification)	
Class II (upper middle)	33 (51.6)
Class III (middle)	28 (43.7)
Class IV (upper lower)	3 (4.7)

Out of 64 ASHA, 25 (39.15) ASHA told that new-born babies given bath immediately after delivery.40 (62.5%) ASHA replied that nothing should be applied on umbilical stump of new-born. Mostly 62 (96.9%) ASHA were known that breastfeeding should be given first to the new-born and 61 (95.3%) ASHA were known that breastfeeding should be initiated within one hour of normal delivery. Knowledge regarding first postnatal visit, 43 (67.2%) ASHA replied that first visit should be conducted within one week of delivery followed by within 24 hour of delivery by 18 (28.1%) ASHA and no visit by 3 (4.7%) ASHA. When ASHA were asked about that new-born should be kept warm by wrapping especially in winter, 62 (96.9%) ASHA answered yes and 46(71.9%) ASHA replied that additional supplements like the honey/ water/ Ghuti be given to a baby, within first six months (Table 2).

Table 2: Knowledge of ASHA regarding new-born and its feeding (n=64)

Knowledge regarding new-born	Number (%)
Bathing of new-born	
Immediately after delivery	25 (39.1)
After 24 hours of delivery	6 (9.4)
After 3 days of delivery	18 (28.1)
After one week of delivery	15 (23.4)
Application on umbilical stump	
Nothing	40 (62.5)
Mustard oil	13 (20.3)
Antiseptic powder	10 (15.6)
Others(Ghee)	1 (1.6)
First feed given to the new-born	
Honey	2 (3.1)
Breast milk/Colostrum	62 (96.9)
Initiation of breastfeeding in normal delivery	
Within one hour of delivery	61 (95.3)
After 3 days of delivery	1 (1.6)
After one week of delivery	2 (3.1)
First postnatal visit should be conducted	
Within 24 hour of delivery	18 (28.1)
Within One week of delivery	43 (67.2)
No visits	3 (4.7)
New-born should be kept warm by wrapping, especially in winter	
Yes	62 (96.9)
No	1 (1.6)
Don't know	1 (1.6)
Should additional supplements like the honey/ water/ Ghuti be given to a baby, within first six months	
Yes	46 (71.9)
No	15 (23.4)
Don't know	3 (4.7)

Knowledge regarding complimentary feeding started at 6 months, 52 (81.3%) ASHA were knew it. Regarding knowledge of vaccines under UIP, majority of ASHA 62 (96.8%) were aware of it and 61 (95.3%) ASHA were correct knowledge of vaccination schedule under UIP. Knowledge regarding side effects of DPT vaccination, 46 (71.8%) ASHA said that fever is most common side effect followed by pain 44 (68.7%) and swelling 29 (45.3%). 16 (25.0%) ASHA said that a baby should be taken for immunization if the child has high fever. Out of 64 ASHA, knowledge regarding advice given to mother of diarrhoeal child, 27 (42.1%) advice continue food, water and breastfeeding and take care to prevent dehydration and 35 (54.7%) ASHA said that breastfeeding should be continued if the baby has diarrhoea (Table 3).

Table 3: Knowledge of ASHA regarding child health (n=64).

Knowledge regarding child health	Number (%)
Complementary feeding should be started at-last	
<6 months	8 (12.5)
6 months	52 (81.3)
>6 months	4 (6.3)
Vaccines given to children under universal immunization programme (UIP)*	
BCG	62 (96.8)
OPV	62 (96.8)
DPT	62 (96.8)
Measles	62 (96.8)
Hep B	59 (92.2)
Vitamin A	58 (92.1)
Correct knowledge of vaccination schedule under UIP	
Yes	61 (95.3)
No	3 (4.7)
Side effects of DPT vaccination*	
Fever	46 (71.8)
Pain	44 (68.7)
Swelling	29 (45.3)
A baby should be immunized if it has high fever	
Yes	16 (25.0)
No	42 (65.6)
Don't know	6 (9.4)
Advice to mother if the child has Diarrhoea	
Give neither food nor water	5 (7.8)
Give water but no food	12 (18.8)
Excess fluid, continuous feeding, look for sign of dehydration	20 (31.3)
Continue food, water and breastfeeding and take care to prevent dehydration	27 (42.1)
Breastfeeding to be continued if the baby has diarrhoea	
Yes	35 (54.7)
No	25 (39.1)
Don't know	4 (6.3)

*Multiple responses.

Table 4: Logistic regression on factors affecting knowledge of ASHA regarding complementary feeding of child.

Factors	Frequency	B	Sig.	Exp (B)	95% C.I. for EXP(B)	
					Lower	Upper
Age(years)						
>40*	13					
21-30	24	0.370	0.687	1.447	0.239	8.757
31-40	27	0.223	0.807	1.250	0.208	7.505
Religion						
Muslim*	8					
Hindu	56	0.904	0.999	1.482	0.254	7.214
Caste						
General*	10					
OBC	36	0.776	0.494	2.172	0.235	20.097
SC	18	0.944	0.430	2.571	0.246	26.851
Marital status						
Married*	57					
Widow	7	0.631	0.486	1.880	0.318	11.106

Education						
Primary*	10					
Middle	45	1.232	0.141	1.292	0.057	1.505
High-school	9	0.624	0.517	1.867	0.283	12.31
Type of family						
Joint*	42					
Nuclear	22	0.811	0.213	2.250	0.628	8.057
Socioeconomic status						
Middle*	31					
Upper Middle	33	1.841	0.025	6.304	1.255	31.66

*Reference category

In the present study while applying logistic regression analysis on factors affecting knowledge of ASHA regarding complementary feeding of child, age group (21-30 years and 31-40 years), Hindu religion, OBC and SC caste, Widow ASHA, Middle and High school educated ASHA, Nuclear family and Upper middle socioeconomic status of ASHA are the prime factors which affects knowledge of ASHA regarding complementary feeding of child (Table 4).

DISCUSSION

Bio-social characteristics of ASHA

Predominantly the ASHA belonged to age group of 31-40 years 27 (42.2%), Hindu by religion 56 (87.5%), OBC caste 36 (56.3%), married 57 (89.1%), educated up to middle class 45 (70.3%), joint family 42 (65.6%) and 33 (51.6%) ASHA from social class II (Upper-middle). (Table 1).

Our study findings was similar to the findings of study where most of the ASHA were in the age group of 30-35 years 61 (45.2%) and only 11 (8.1%) ASHA in the age group of 25-30 years.[6] But contrary to this in the study Shashank where majority 71 (53.8%) of ASHA in the age group of 26 to 30 years.[7] The above findings is similar to the findings of Garg where out of 105 ASHA, 93 (88.57%) were married, 101 (96.19%) of ASHA worker completed 8th standard of the schooling and 89 (84.76%) of ASHA worker were Hindus.[8] Whereas study done by Kansal who found that out of 135 ASHA, 59 (43.7%) were from OBC caste and 42 (31.1%) educated up to eighth standard.[9] The study done by Singh et al where out of 135 ASHA, most of the ASHA 93 (68.9%) belong to class IV (upper lower) socioeconomic status according to modified B.G Prasad classification.[6]

Knowledge of ASHA regarding new-born and child health

In the present study, out of 64 ASHA, 25 (39.15) ASHA told that new-born babies given bath immediately after birth. 40 (62.5%) ASHA replied that nothing should be applied on umbilical stump of new-born. When ASHA were asked about that new-born should be kept warm by wrapping, 62 (96.9%) ASHA answered yes (Table 2).

A study done by Dinesh Paul in their study reported by ASHAs included keeping the child warm (84%); not bathing the child until the 2nd day in case of normal weight (35%); keeping to cord dry (43%).[10]

Mostly 62 (96.9%) ASHA knew that breastfeeding should be given first to the new-born and 61 (95.3%) ASHA were known that breastfeeding should be initiated within one hour of delivery and 46 (71.9%) ASHA replied that additional supplements like the honey/ water/ Ghuti be given to a baby, within first six months in the present study (Table 2).

A study done by Paul, the knowledge of ASHAs about initiation of breastfeeding within an hour; feeding colostrum; avoiding pre-lacteal feeds and exclusive breastfeeding for six months was reported by 96 percent, 99 percent, 92 per cent and 98 percent of ASHAs.[10] The study findings were similar to the findings of Mahyavanshi where among 130 ASHA workers, 126 (96.92%) ASHA had good knowledge; attitude and practice regarding pre lacteal feed and 107 (82.31%) knew the importance of immediate breast feeding, within half an hour of normal delivery. Around 90% ASHA had improper knowledge regarding hypothermia.[11]

On the contrary, study done by Lodhiya where out 218 health worker female, 138 (63.30%) discouraging the use of pre-lacteal feeds to mothers.[12] Thakre et al found that 94.44% of ASHA had proper knowledge of the fact that pre-lacteal feeds need to be given.[13] On the other hand to this Shashank et al reported that 87.1% of ASHA educate about breastfeeding to the mother before the delivery and 100% of them educate the mother and advocated breastfeeding to the new born as soon as possible after delivery. All the 132 ASHA workers gave the correct responses regarding prevention of hypothermia, care of umbilical cord, pre lacteal feeds and exclusive breastfeeding practices.[7] Bajpai in their study done on ASHA in Rajasthan found that 98% of the ASHAs educate the mother regarding breastfeeding antenatally and 96% educate the mother post-natally.[14]

Knowledge regarding first postnatal visit in the present study, 43 (67.2%) ASHA replied that first visit should be conducted within one week of delivery followed by

within 24 hour of delivery by 18 (28.1%) ASHA and no visit by 3 (4.7%) ASHA (Table 2).

Kohli in their study concluded that only 67.3% ASHA workers reported that they used to visit the newborn in their area within a week of birth.[15] Another study carried out in Uttar Pradesh by Kansal et al. found that 82% of ASHA workers used to visit newborns in the area.[9]

In the present study when ASHA were asked regarding complimentary feeding started at 6 months, 52 (81.3%) ASHA knew it (Table 3).

On the other hand study done in Delhi reported that ASHA's knowledge about the correct age of weaning was 54%.[16]

In the present study regarding knowledge of vaccines under UIP, majority of ASHA 62 (96.8%) were aware of it. Out of 64 ASHA, 61(95.3%) ASHA were correct knowledge of vaccination schedule under UIP. Knowledge regarding side effects of DPT vaccination, 46 (71.8%) ASHA said that fever is most common side effect followed by pain 44 (68.7%) and swelling 29 (45.3%). In present study, 16 (25.0%) ASHA said that a baby should be immunized if the child has high fever (Table 3).

The findings of the present study were similar to the findings Shashank where only 58 (43.9%) ASHA were aware that child suffers from fever after DPT vaccination. 65 (49.3%) ASHA opined to post-pone the vaccination if child is suffering from high grade fever.[7] On the contrary in the study of Mahyavanshi, where nearly 63% of ASHA knew which are the vaccine preventable diseases but 70% ASHA workers had poor knowledge regarding schedule of immunization, had less knowledge when to take child for vaccination and for which vaccines.[11] Another study reported that out of 83% new-borns that were administered BCG vaccination, 59% were facilitated by the ASHA in getting the immunization.[1] Study done by Srivastava reported that 70.1% ASHA had good knowledge regarding importance of immunization and its adverse effects.[17]

In the present study, when the ASHA were asked about breastfeeding should be continued if the baby has diarrhoea, 35 (54.7%) ASHA said yes (Table 3).

The findings of the present study are however, not in accordance with the previous study of Shashank where all the 132 ASHA agreed that ORS should be the initial treatment for Diarrhoea in children and 98 (74.8%) advised mother to continue breastfeeding even if child is suffering from severe diarrhea.[7]

CONCLUSION

ASHA act as a 'bridge' between the rural population and health service outlets and plays a central role in achieving national health and population policy goals. The mission had been successful in putting in place large voluntary community health workers which has contributed in a major way in improving the utilization of health facilities and increased health awareness. It was concluded from the study that majority of ASHAs know their role and details of their practices in newborn and child care except bathing of new born and additional supplements. The present study showed that knowledge is good in certain areas, but improvement is needed in terms of knowledge and skills to deliver child health services effectively.

Recommendations

The training programme focus on making the ASHA understand the importance of her role in providing immunization services for the community. The Government can also conduct frequent refresher training programmes for the ASHA to strengthen their knowledge and also inform them of recent advances and changes in approach to child health issues. Community needs to be apprised/ fed back regarding services and important positive achievements of ASHA in relation to health status of child through community leaders and other stakeholders. This will garner more community participation and will make the community more receptive towards availing of ASHA services. A system of monitoring and supervision of ASHA needs to be developed at the district level, so as to ensure that she provides the complete range of services related to child health as intended.

ACKNOWLEDGEMENTS

I would like to thanks all Medico Social Worker of SRMSIMS and ASHA for their help in data collection.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee of SRMSIMS

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Cite this article as: Saxena S, Singh AK, Maheshwari S, Gupta SB. Appraisal of knowledge of ASHA regarding child health services provided under NHM in Bhojipura block, District Bareilly. Int J Community Med Public Health 2017;4:3705-11.