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Performance of accredited social health activists for maternal health component of their job responsibility in a rural block of Sonipat district of Haryana: a cross-sectional study

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ABSTRACT

Background: Accredited social health activists (ASHAs) play an inevitable role in universal healthcare provision. Improving maternal health has been essential element for achieving health for all. ASHAs and their activity are considered as the one of the key components of national health mission. This study was conducted to assess the performance of ASHAs for maternal health component of their job responsibility in rural block of juan, Sonipat district of Haryana.

Methods: This descriptive cross-sectional study was conducted among all ASHAs in rural block of juan, Sonepat district of Haryana between April 2018 to March 2019. Pretested semi-structured interview schedule was used to collect the data. The activity wise as well as cumulative incentive received by the ASHAs for the previous six months was used for study purpose. Data was analyzed by using SPSS version 22.

Results: All the ASHAs prepared the monthly list of pregnant women. Almost all (97.9%) ASHAs registered the pregnant women up to 12 weeks and all of three antenatal check-ups within concerned trimester and 95.9% ASHAs involved in HBPNC cases. Total incentive earned by ASHAs in maternal health components was ranging from Rs. 950-12150, average incentive earned was Rs. 4982 during the period of six month.

Conclusions: There is a huge variation in the incentive earned by in maternal health component by the ASHAs. Further more than half of the ASHAs have not accompanied the pregnant women to the institutional delivery.

Keywords: ASHA performance, Maternal health, Universal healthcare

INTRODUCTION

The role of community health workers (CHWs) in healthcare delivery system is considered inevitable to meet the universal healthcare provision. The term CHW encompasses a wide variety of local healthcare providers ranging from nurse midwives to home based care givers and salaried staffs to volunteers. CHWs are defined as community members who work almost exclusively in community settings and who serve as connectors between health care consumers and providers to promote health

among groups that have traditionally lacked access to adequate care. Most CHW programs enroll female health workers, due to importance of maternal and child health. Maternal mortality and morbidity are significant health problems in developing countries. Improving maternal health has been an essential element for achieving health for all.²

The national rural health mission (NRHM) was launched by the government of India in 2005 to strengthen the healthcare delivery system. One of the most important components Initiated was the introduction of ASHA who acts as interface between community and public health system.³ The ASHA programme sought to institute a local female health worker in every village with a population over 1,000. By July of 2015, about 8,56,405 ASHAs functioning in India. The key goal is to ensure achievement of indicators, toward enabling and achieving the stated vision by various strategies, for example, it seeks to reduce maternal mortality rate to 1/1,000 of live births, infant mortality rate to 25/1,000 of live births, and total fertility rate to 2.1.⁴

ASHA is working on a volunteer basis. ASHAs must be women of resident of the village preferably in the age group of 25-45 years and she should be the literate women till 10th standard. The concept of ASHAs was to bridge the gap between the health system and the community.³ She works with the FHWs to provide and make assess of all type of health care. There are various responsibilities of ASHAs but maternal health is one of the most important components of their work. She receives remuneration from the health department for their work performance. The involvement of ASHA has strengthened the primary health care in India by addressing the key issues of health disparity by keeping in mind the following principles of primary health care.⁵

It is a well-known fact that ASHAs are the backbone of national health mission (NHM). There is hardly any data present over incentive-based work done by ASHAs in maternal health component in a rural field. Maternal health is one of the most important components of their work performance. They get different incentives for different work for which they performed their duties. Based on this background, a study has been planned to assess the incentive-based work performance of ASHAs for maternal health component in a rural block of juan, Sonipat district, Haryana.

METHODS

The study was a descriptive type of cross-sectional study. The study was carried out in CHC juan come under Sonipat district of Haryana. The district comprises of seven CHC namely and this study was conducted in CHC juan rural field practice area of department of community medicine, Bhagat phool singh government medical college for women khanpur kalan. The total population of CHC juan is 2,22,483.6 This is located at a distance of 18 km from medical college. All ASHAs working in field practice area of CHC juan. The study was conducted from April 2018 to March 2019.

We included all ASHAs working in study area who gave consent. We excluded those were suffering from serious illness which makes them unable to work at least for the previous six months and those ASHAs who were pregnant during study period.

Sampling technique and sample size

Universal sampling was taken to include all ASHAs working in study area after fulfilling inclusion and exclusion criteria for the study. There were 199 ASHAs in block juan of Sonipat district.

Data collection procedure

List of ASHAs working in CHC, juan area was obtained from the ASHA coordinator and it was coded for the maintaining anonymity of the participant and confidentiality of the information. Participants were contacted for data collection after their meeting at respective PHC or at CHC juan. Data related to performance-based incentive was obtained from the office of senior medical officer in charge of CHC juan. The activity wise as well as cumulative incentive received by the ASHAs for the previous six months was used for study purpose.

Study tools for data collection

Pretested semi structured interview schedule was used. It has three different parts to address different objectives of the study. Information was collected under following headings.

Socio-demographic profile

This section consisted of variables related to the general demographic and socio-economic information of the study subjects like age, religion, marital status, caste, education of ASHA worker, any other occupation apart from ASHA work, type of family, total family member, family income and work experience. Socio-economic status of the family was calculated by using modified BG prasad classification.

Duties

This section sought information on performance related to length of services of ASHAs, population served by ASHAs and household visits done by ASHAs.

Incentive based work performance of ASHAs in maternal health component

Incentive based work performance was measured by individual as well as cumulative incentive earned by each ASHA for doing various duties in maternal health component such as to prepare the monthly wise list of pregnant women, Registration of pregnant women up to 12 weeks and all 3 antenatal check-up within concerned trimester, accompany the case of pregnant women delivered at government hospitals which belonged to BPL/SC category and visit and care in home based postnatal care (HBPNC) cases. Information regarding incentive earned for each activity performed was entered in the respective column in the proforma.

Operational definition

Incentive

Incentive was taken in Indian rupees (INR). The incentives of ASHA for different task lies 100 Rs/month for preparation of monthly wise list of pregnant women is 100 Rs/month, 250 Rs/month for registration of pregnant women up to 12 weeks and all 3 antenatal check-up within concerned trimester, 300 Rs/case for accompany the cases of pregnant women delivered at government hospital which are belonging to BPL/SC category and 250 Rs/case visit and care in HBPNC.⁷

Statistical analysis

The data were entered in microsoft excel sheet and analysed using SPSS v 22 statistical software. The result was presented in form of tables and diagram. For quantitative data mean, median was calculated and categorical outcome were summarized in proportion.

Ethical considerations

Administrative approval of the study was taken from the concerned authorities of the district Sonipat. Ethical clearance was taken from the institutional ethics committee of the Bhagat phool singh government medical college for women khanpur kalan, Sonipat.

Informed consent

Each participant was explained about the purpose of study and written well informed consent was taken from them. Confidentiality and anonymity were maintained.

RESULTS

All of the ASHAs were eligible for study according to inclusion and exclusion criteria and response rate was 100%. Table 1, describe the socio-demographic profile of respondents. In our study among 199 ASHAs, 52.7% were in the age group of 30-39 years. A predominant number of ASHAs (98%) belonged to Hindu religion. Almost one third (32.2%) ASHAs were belonging to SC and about one fifth 36 (18.1%) were from OBC or rest of the ASHAs 99 (49.7%) were belonging to others category. Maximum ASHAs 96 (48.2%) were educated up to 8th class and 24 (12%) was educated up to primary school. Only 11 (5.5%) of ASHAs were having additional source of income such as tailoring and parlour work at home. The largest number of ASHAs 120 (60.4%) belonged to nuclear families. Maximum 92 (46.3%) ASHAs were in class II followed by 74 (37.2%) in class III, then 26 (13%) in class IV.

Table 2, describes the distribution of study participants according to their duties. This depicts that maximum (47.2 %) ASHAs had length of the service was more than 10 years. Most of the ASHAs 70 (35.2%) covered 900-

1100 population followed by 48 (24.2%) who covered 700-900 population, 43 (21.6%) covered 1100-1300 population and 18 (9%) covers more than 1500 population. About 5-6 household visits in a weak were made by 26 (13%) ASHAs followed by 3-4 visits by 109 (54%) of ASHAs but 64 (32%) of the ASHAs made just 1-2 household visits per week.

Table 1: Socio-demographic characteristics of the study participants.

Variable	Number of ASHAs (N)	Percentage (%)					
Age in years							
≤25	6	3.0					
25-29	21	10.6					
30-34	53	26.6					
35-39	52	26.1					
40-44	39	19.6					
≥45	28	14.1					
Religion							
Hindu	195	98					
Muslim	4	2.0					
Caste							
OBC	36	18.1					
SC	64	32.2					
Others	99	49.7					
Education of AS	SHA						
Primary	24	12.0					
Middle	96	48.2					
High school	27	13.5					
Intermediate	46	23.2					
Graduate/post graduate	6	3.0					
Other source of income							
Yes	11	5.5					
No	188	94.5					
Type of family							
Nuclear family	120	60.4					
Joint family	79	39.6					
Marital status							
Married	188	94.5					
Widowed	11	5.5					
Socio-economic class (according to modified B.G							
Prasad scale)							
Class I	7	3.5					
Class II	92	46.3					
Class III	74	37.2					
Class IV	26	13.0					
Class V	0	0					

Table 3, this section shows the distribution of the ASHAs by average incentive earned for the maternal health components of their job responsibilities during the study period of six months. Table 3, depicts that all the 199 study subjects participated in preparing the monthly list of pregnant women and earned incentives ranging from

Rs. 400 to 600 averages being Rs. 582. Most of the respondents, 195 (97.9%) registered the pregnant women and got their antenatal check-up. They earned incentive maximum up to Rs. 6200 average being Rs. 1558, while rest of the ASHA did not participate in this activity. Nearly half of ASHAs 94 (47.2%) earned incentive ranging from Rs. 0-3900 average being Rs. 387 through JSY, remaining 105 (52.7%) ASHAs did not involve in this activity. Almost half of ASHAs 96 (48.2%) accompanied pregnant women belonging to BPL/SC category who delivered at government hospitals and they earned incentive up to Rs. 2400 average came out to be Rs. 371, remaining 103 (51.7%) ASHAs did not participate this component of their duty. All most all the ASHAs 191 (95.9%) were involved in HBPNC and earned an incentive up to Rs. 6500 in which average was found to be Rs. 2084, while only eight (4.1%) of ASHAs were not involved in HBPNC. Total incentive earned by ASHAs in maternal health components was ranging from Rs. 950-12150; the average incentive earned was Rs. 4982.

Table 2: Distribution of study participants according to their duties.

Variable	Number of ASHAs (N)	Percentage (%)			
Length of their service (years)					
1-5	39	19.6			
5-10	66	33.2			
>10	94	47.2			
Population served by the ASHAs					
≤700	10	5.0			
701-900	48	24.2			
901-1100	70	35.2			
1101-1300	43	21.6			
1301-1500	10	5.0			
>1500	18	9.0			
Number of visits					
1-2	64	32.3			
3-4	109	54.7			
5-6	26	13			

Table 3: Distribution of ASHAs by average incentive earned for the maternal health components of their job responsibility during the study period of six month.

S. no	Work done by ASHAs	Number of ASHAs involved in the	Average incentive earned (INR) (n=199)	
		activity (n=199) (%)	Range	Mean
1	To prepare the monthly wise list of pregnant women	199 (100)	400-600	582
2	Registration of pregnant women up to 12 weeks and all 3 antenatal check up within concerned trimester	195 (97.9)	0-6200	1558
3	Janani Suraksha Yojana (JSY) ANC check up	94 (47.2)	0-3900	387
4	Cases accompany in case of pregnant women delivered at government hospitals which are belonging to BPL/SC Category	96 (48.2)	0-2400	371
5	Visit and care in home based post neonatal care (HBPNC) cases	191(95.9)	0-6500	2084
Incentiv	e earned for the maternal health components		975-12150	4982

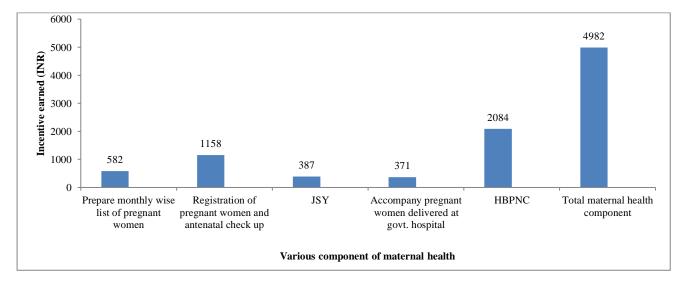


Figure 1: Distribution of ASHAs by average incentive earned for the maternal health components of their job responsibility during the study period of six month.

DISCUSSION

As per maternal health, community participation is important for ASHAs. ASHAs are the local women of the community mostly between age group of 25-45 years and she should be educated up to 8th standard.³ In our study, most of the study participant (82.1%) constituted the age group of 25-45 years. Similar distribution was reported by Fathima et al done in Karnataka.⁸ Majority of the study participant (48.2%) were educated up to middle school, similar to a study conducted by Waskel et al.⁹

A study conducted by Waskel et al found that 193 (93.68%) were married. Similar finding was also present in our study. Majority (98%) were Hindu by religion which is similar to the observations of Sexana et al. 10 Reason for such findings in our study may be because of the fact that population of the study area lacked religious diversity as in the Infield practice area of RHTC juan, Sonipat district maximum population was belonging to Hindu religion only. In current study for most of the ASHAs (94.5%) their only source of income was the incentive earned on as ASHAs profession to earn while a small proportion of ASHAs 5.5 per cent ASHAs were also engaged with their small source of income like tailoring and parlour work at home. Similar finding was reported by Desai et al and Karol et al.11,12 Reason for such finding in our study may be because of limited scope for any other ventures, being a remote rural area. In present study 99 (49.7%) of ASHAs were belonging to others category followed by 64 (32.2%) of SC. About one fifth 36 (18.1%) were from OBC. Similar finding was present in Panda et al conducted a study in rural block of Haryana.¹³ In contrast of our study done by Kansal et al found that 43.7% of ASHA were from OBC caste.14 Reason for such finding in our study may be because of recruitment of ASHA was not in accordance with population proportion as recommended in NHM guidelines. In present study almost all the ASHAs 120 (60.4 %) belonged to nuclear family while 79 (39.6%) were belong to joint family. Similar finding was also present in Desai et al.11 In contrast to our study other studies as like Sexana et al conducted a study in district Bareilly found that 65.6% of ASHAs were belonging to joint family. 10 Reason for such finding in our study may be because of economic stress joint families were breaking faster in the study area. Maximum number of ASHAs (46.3%) was in class II according to modified B.G prasad scale followed by (37.2%) class III. Similar finding was also present in the study conducted by Sexana et al.¹⁰ Reason for such finding in our study may be because of the poor socio-economic status of ASHA makes them depend on the incentives since it is their main source of income.

In this study 66.8 % of ASHAs length of the service was more than 10 years. Similar finding was also present in Gupta et al. ¹⁵ In present study about one third of ASHAs covered 901-1100 population and rest covered more than 1100 population. In contrast of our study conducted by Kohli et al in Delhi found that maximum number of ASHAs (87.3%) covered the population of 1000-2000. ² It

is quite obvious for observation of our study as well as other study that the populations covered by ASHA vary largely. So that leading to this disproportionate population. In our study we found that 3-4 household visits in a weak was made by 54.7% ASHAs but 13% of the ASHAs made just more than four household visit per week. Another study conducted by Kohli et al found that almost 80% of ASHAs made more than four household visits.² Reason for such finding in our study ASHAs may not visiting the adequate number of visits in the study area and that may be have an adverse effect on health care provided by them.

In our study all the ASHAs were preparing the monthly list of pregnant women and earned an incentive in the Range of Rs. 400 to 600, average being Rs. 582. This is higher than the finding reported by Kohli et al and Waskel et al.^{2,9} In present study almost all the ASHAs (97.9%) registered the pregnant women and got their antenatal check-up. They earned incentive ranging from Rs. 0 to 6200, average being Rs. 1558. Similar findings were found in a study conducted by Gosavi et al that all the ASHAs (99%) involved in antenatal services. ¹⁶ In contrast to our study conducted by Karol et al found that out of the total number of antenatal cases, 68.54% of them have been motivated by ASHAs and who had been sent by them to the nearest health care centre to receive antenatal care such as early registration of pregnancy. ¹²

In our study we found that nearly half of ASHAs 94 (47.2%) explained regarding JSY and earned incentive ranging from Rs. 0 to 3900, average being Rs. 387. Makwana et al found that 92.1% of ASHAs explained about the JSY.¹⁷ Bajpai et al found that proportion of the ASHAs involved in activity of delivery in different states were 93%, 93%, 94% and 98% in Bihar, Chhattisgarh, Rajasthan and U.P respectively.¹⁸ All most half of ASHAs 96 (48.2%) accompanied the pregnant women for delivery at government hospitals and for this activity they earned incentive ranging from Rs. 0 to 2400, average being Rs. 371. In contrast to our findings study conducted by Fathima et al found that 96.3% of ASHAs accompanying the woman for institutional delivery whereas approximately in accordance with our study done by Kohli et al found that only 40% ASHAs accompany pregnant females to the hospital for delivery.^{8,2} Reason for such finding in our study may be the involvement of ASHAs much lesser than the Fathima et al and more than the Kohli et al this might be due to divided opinion as about half of the ASHAs considered the incentive earned by this activity is main source of earning while the second half among the ASHAs avoided the accompany pregnant women for delivery for government hospital citing nonpayment of travel money.

In this study, almost all the ASHAs (95.9%) were involved in visit and care in home based post-natal care (HBPNC) and earned an incentive ranging from Rs. 0 to 6500, average being Rs. 2084. Fathima et al found that 73.1% of ASHAs were visiting the new-born for advice and care. Swain et al found that 81.3% of ASHAs were involved in the activity of home based postnatal care. 8,19

Higher rate of incentive may be the reason for more involvement of ASHAs in this activity.

CONCLUSION

There is a huge variation in the incentive earned in maternal health component by the ASHAs, minimum being Rs. 975 and maximum being Rs. 12150. Further more than half of the ASHAs have not accompanied the pregnant women to the institutional delivery. Other three components which could easily be performed in their locality, most of the ASHAs has participated.

Recommendations

It is recommended that national health mission must inculcate missionaries zeal amongst ASHAs that they are the most valuable ambassador of women health and they are the inseparable part of maternal and child care from registration of pregnancy to the outcome of pregnancy.

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