

Knowledge and practice of Accredited Social Health Activists for maternal healthcare delivery in Delhi

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ABSTRACT

Introduction: The role of community health workers in healthcare delivery system is considered inevitable to meet the goal of universal healthcare provision. The study was planned to assess the knowledge and practices for maternal health care delivery among Accredited Social Health Activist (ASHA) workers in North-East district of Delhi, India. **Materials and Methods:** A descriptive cross-sectional study was conducted in North-East district of Delhi among 55 ASHA workers after taking written informed consent. Data were collected using a pretested semi-structured questionnaire consisted of items on sociodemographic profile of ASHA workers, knowledge, and practices about maternal health. The data was analyzed by using SPSS software version 17. Qualitative data were expressed in percentages and quantitative data were expressed in mean \pm standard deviation (SD). **Results:** Mean age (\pm SD) of ASHAs was 31.84 ± 7.2 years. Most of the ASHAs workers were aware of their role in provision of maternal health services. Most of the ASHAs workers were aware of their work of bringing mothers for antenatal check-up (94.5%), counseling for family planning (96.4%), and accompanying them for hospital for delivery (89.1%). 87% of ASHAs knew that iron tablets have to be taken for minimum 100 days during pregnancy. 51 (92.7%) ASHAs reported that they used to maintain antenatal register. Some problems reported by ASHAs while working in community were shortage of staff at health center (16.4%), no transportation facility available (14.5%), no money for emergency, and opposition from local dais (12.7% each). **Conclusion:** Present study showed that ASHAs knowledge is good but their practices are poor due to number of problems faced by them which need to be addressed through skill based training in terms of good communication and problem solving. Monitoring should be made an integral part of ASHA working in the field to ensure that knowledge is converted into practices as well.

Keywords: Community health worker, family welfare, maternal health, universal healthcare

Introduction

The role of community health workers (CHWs) in healthcare delivery system is considered inevitable to meet the millennium development goals.^[1] 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.^[2] 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.”^[3] Most CHW programs enroll female health workers, due to importance of maternal and child health.^[4]

Maternal mortality and morbidity are significant health problems in developing countries. Improving maternal health has been an essential element for achieving health for all.^[5] 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 Accredited Social Health Activist (ASHA) who act as interface between community and public health system.^[6] ASHA is expected to ensure the antenatal, natal and postnatal services to women, counseling on family planning and nutrition, safe abortion, escort or accompany the pregnant female to hospital for institutional delivery, to create awareness on institutional delivery, potential danger signs and complications during pregnancy, delivery and postpartum period and to mobilize the community toward increase utilization of the existing health services.^[7]

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Since ASHA workers are grass root level workers, the success of NRHM in India depends on how well ASHAs are trained and perform. Hence, it is essential to study if they have adequate knowledge and practices for delivering the maternal health care services to community. At the same time, it is important to address the problems faced by ASHA workers while working in the community to deliver maternal health care services and to study their perception about training component so that suitable modifications and corrective actions can be taken if required. With this rationale, the present study was carried out with an objective to assess the knowledge and practices for maternal health care delivery among ASHAs in North-East district of Delhi, India.

Materials and Methods

A descriptive cross-sectional study was conducted in Seelampur Tehsil of North-East Delhi district among ASHA workers recruited under NRHM, Delhi covering a population of approximately 110,000. Study area was chosen by using convenience sampling method since it is field practice area under Department of Community Medicine, Maulana Azad Medical College, New Delhi. A total of 55 ASHA workers who provide services in area constituted the study population. Data was collected using a pretested semi-structured questionnaire prepared in English and translated in local Hindi language. Questionnaire consisted of items on socioeconomic and demographic profile of ASHA workers like age, educations status, income, religion, etc. Questions on knowledge and practices about maternal health like complications, danger signs, home visits paid in antenatal period, etc., were included. Perception of ASHAs about their training regarding maternal health was also assessed.

The data was entered in MS-Excel and analyzed by using SPSS software version 17 (Chicago II, USA). Qualitative data were expressed in percentages and quantitative data was expressed in mean \pm standard deviation (SD). The objective and procedure of the study was explained to the participants. Written informed consent was taken from the study subjects. The option to opt out of the study was kept open without any clause. The data was kept confidential and was used for research purpose only. Approval was taken from Institutional Ethical Committee for the study.

Results

Sociodemographic profile

Table 1 shows sociodemographic profile of ASHA workers. Mean age (\pm SD) of ASHAs was 31.84 ± 7.2 years. Maximum 31 (56.4%) belonged to age group of 25–35 years. 47 (85.5%) were Hindu and 8 (14.5%) ASHAs belonged to Muslim community. Majority (61.8%) of ASHAs were educated up to or above senior secondary school and most of them were married (96.4%). 16 (29.1%) belonged to scheduled caste, 16 (29.1%) to other backward classes and 21 (38.2%) to general category. Majority (87.3%) were catering to a population of 1000–2000. Mean (\pm SD) population catered was $1891.85 (\pm 384.27)$.

Knowledge of Accredited Social Health Activists about antenatal care

Forty-one (74.5%) reported that minimum number of antenatal visits are 4 while 4 (7.3%) said minimum visits to be 6. ASHAs were asked about their knowledge about symptoms of potential complications a pregnant woman can suffer during pregnancy and delivery. 80% of ASHAs were aware of about excessive vomiting and swelling of feet while breathlessness was known to only 78.2% of ASHAs [Table 2].

Regarding what would they do if any female had any above compliant, 46 (83.6%) reported that they would consult auxiliary nurse-midwife (ANM) while 7 (12.7%) said they would refer her to hospital. One (1.8%) reported that she will advise for home-based treatment for above complaints. ASHAs were asked if they were aware of their roles and responsibilities regarding maternal health. Most of the ASHAs workers were aware of

Table 1: Sociodemographic profile of ASHA workers

Characteristic	n=55	Percentage
Age (in years)		
<25	8	14.5
25-35	31	56.4
35-45	16	29.1
Religion		
Hindu	47	85.5
Muslim	8	14.5
Education		
Middle	5	9.1
Secondary	16	29.1
Senior secondary and above	34	61.8
Marital status		
Unmarried	2	3.6
Married	53	96.4
Caste		
SC	16	29.0
ST	2	3.6
OBC	16	29.1
General	21	38.2
Population served		
<1000	4	7.3
1000-2000	48	87.3
>2000	3	5.5

ASHA: Accredited Social Health Activist; SC: Scheduled castes; ST: Scheduled tribe; OBC: Other backward classes

Table 2: Knowledge of ASHAs about symptoms of complications of pregnancy and delivery

Complications*	Positive response (total n=55)	Percentage
Excessive vomiting	44	80
Swelling of feet	43	78.2
Anemia/paleness	47	85.5
Excessive bleeding	43	78.2
Weak/no movement of fetus	47	85.5
Visual disturbances	41	74.5
Breathlessness	43	78.2

*Responses are not mutually exclusive. ASHAs: Accredited Social Health Activists

their work of bringing mothers for antenatal check-up (94.5%), counseling for family planning (96.4%), and accompanying them for hospital for delivery (89.1%). Awareness of their role in distribution and intake of tablet iron and folic acid was known to 47 (85.5%) of ASHAs. 87% of ASHAs knew that iron tablets have to be taken for minimum 100 days during pregnancy.

Table 3 shows the results when knowledge about indications of referring a pregnant female to hospital was assessed. Vaginal bleeding (85.5%), labor pains before 8 months (83.6%), convulsions (78.2%) were some of the common responses.

Practices of Accredited Social Health Activists about antenatal care

Fifty-one (92.7%) ASHAs reported that they used to maintain antenatal register. Only 22 (40.0%) ASHAs used to pay 6 home visits to pregnant females, 12 (21.8%) used to pay 5 visits to the same as shown in Figure 1. ASHAs were asked if they accompany pregnant females to the hospital for delivery, 22 (40.0%) said they always accompany while 14 (25.5%) said they sometimes accompany them to hospital. 19 (34.5%) reported that they never accompany pregnant females to hospital.

Problems faced and perception regarding training aspect

Accredited Social Health Activists were encouraged to tell about the challenges they face in providing antenatal care to the community. 13 (23.6%) reported that opposition from family was a major barrier. It was reported that family members were not supporting ASHA workers due to reasons like lack of transportation services available with them and faith in local dais. Other reasons were shortage of staff at health center (16.4%), no transportation facility available (14.5%), no money for emergency and opposition from local dais (12.7% each) as given in Figure 2.

All were aware about the incentives they were entitled to for their work. 53 (96.4%) ASHAs reported that they did not get any money in advance for providing maternal health services in emergency. 67.3% ASHAs received basic training in last

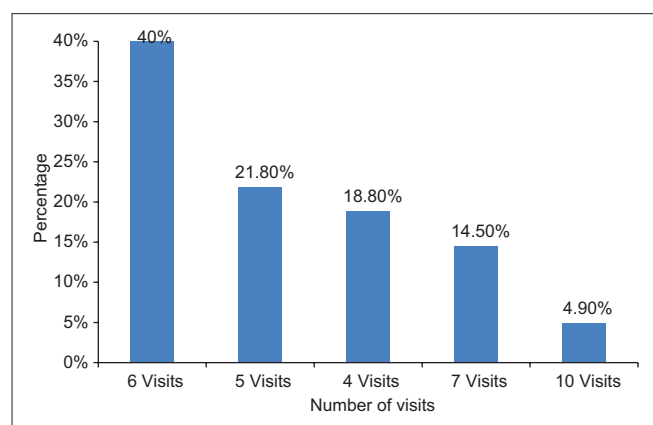


Figure 1: Number of home visits paid by Accredited Social Health Activists to pregnant females

3 months which includes 1 (1.8%) ASHAs received training up to fourth module (national health programs and treatment of minor illnesses) while 12 (21.8%) and 42 (76.4%) received up to sixth (maternal and newborn health) and seventh module (child health and nutrition), respectively. When asked about if they were able to understand the module, 47 (85.5%) responded they always understand the module, 5 (9.1%) said that only sometimes they understand the module, and 3 (5.5%) said they never understand the module. ASHAs were asked about their perception regarding training in services during pregnancy and child birth. 33 (60.0%) perceived that training being complete, 5 (9.1%) felt it being incomplete, 11 (20.0%) felt training need to be repeated while 6 (10.9%) perceived that too much information was being given in training sessions.

Discussion

The current study was conducted to assess the knowledge and practices for maternal health care delivery among 55 ASHAs in Delhi. 80% of ASHAs were aware of about excessive vomiting and swelling of feet as symptom of potential complications of pregnancy and delivery. Most of the ASHAs workers were aware of their work of bringing mothers for antenatal check-up,

Table 3: Knowledge of ASHAs about indications of referring a pregnant female to hospital

Indications*	Positive response (n=55)	Percentage
Vaginal bleeding	47	85.5
Severe headache	31	56.4
Convulsions	43	78.2
Labor pains before 8 months	46	83.6
Rupture of bag of water	39	70.9
Loss of fetal movements	42	76.4
Loss of consciousness	39	70.9
Anemia	32	58.2
Swelling of feet	30	54.5
Fever	25	45.5

*Responses are not mutually exclusive. ASHAs: Accredited Social Health Activists

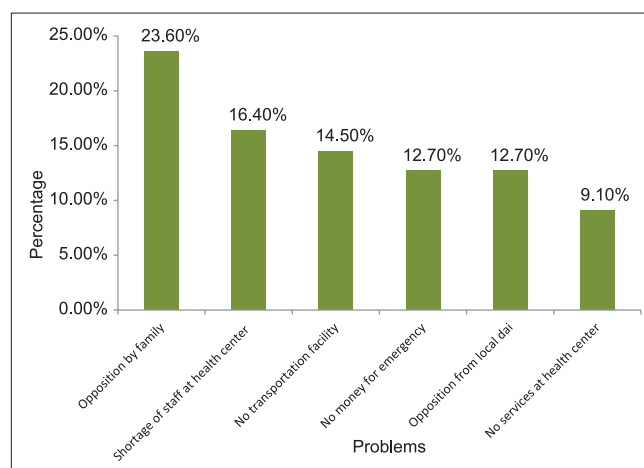


Figure 2: Problems faced by Accredited Social Health Activists in providing antenatal care in community. Note: Responses are not mutually exclusive

counseling for family planning and accompanying them for hospital for delivery. Only 40.0% ASHAs used to pay 6 home visits to pregnant females. 34.5% reported that they never accompany pregnant females to hospital. Problems faced by ASHAs in community were lack of transportation services available with them, faith of community in local dais, shortage of staff at health center, no money for emergency, and opposition from local dais.

Although most of the ASHAs belong to age group of 25–45 years, 8 (14.5%) were below 25 years of age and 2 (3.6%) were unmarried, which is contrary to guidelines of ASHA workers selection.^[7] Similar findings of recruiting ASHA workers against selection criteria have been reported in some previous studies as well where unmarried and other than recommended age group ASHA workers were reported to be selected.^[8,9] The guidelines should be followed strictly to maintain uniformity and transparency in recruitment and selection of ASHA workers. The positive findings were that all ASHA belonged to local community and adequate representation of all castes of community including disadvantageous groups.

The proportion of ASHAs having knowledge about symptoms of complications in pregnancy ranged from 74.5% for symptom visual disturbances to 85.5% for symptom no movement of fetus. Similarly in a study conducted by Karol and Pattanaik in Rajasthan, mean knowledge score for maternal health care was found to be 86.7%.^[10] Since ASHAs may be the first person reported by any pregnant women with symptoms suggestive of complications, it is important that ASHAs should be well aware of such symptoms so that immediate intervention can be done. It was surprising to know that 46 (83.6%) ASHAs reported that they would consult ANM in case someone comes with such symptoms. It should be made clear to them that they must refer such patients to hospital immediately to avoid unnecessary delay. Almost all ASHA workers were aware about their roles and responsibilities regarding maternal and child health services. Similar results were showed by a study conducted by Gosavi *et al.* in Wardha where all ASHAs knew about their role in immunization and antenatal services.^[11] Knowledge about iron and folic acid intake was present in 48 (87.2%) ASHA workers. This is higher than reported by Lodhiya *et al.* in their study conducted in Gujarat in which only 47% health workers were aware of iron and folic acid tablets schedule in pregnancy.^[5] About three-fourth ASHAs were aware that minimum number of antenatal visits are 4 as compared to that stated by a study carried out by Rashmi *et al.* where 81% CHWs were aware of recommended minimum number of ANC visits.^[12]

Ninety-two percent ASHAs reported that they used to maintain antenatal register. This is higher than the findings reported by Waskel *et al.* in their study carried out in Madhya Pradesh where only 57% ASHA workers were maintaining antenatal registers.^[13] Difference in observations could be due to setting variation. Only 22 (40.0%) ASHAs reported that they always accompany pregnant females to the hospital for delivery. ASHAs reported a number of problems in performing their duties in community

like shortage of staff and services at health center, absence of transportation facility, and opposition by local dais and family, etc. This is consistent with the findings reported by Roy and Sahu where absence of logistics like ambulance and economic reasons were cited as reasons for barriers of working by ASHA workers.^[14] It is important to take measures to eliminate the operational barriers for working of CHWs else it will affect the faith of community in the ASHA workers and also lead to dissatisfaction among ASHA workers which are an important pillars in public health care delivery system in India. The importance of above mentioned facts lies in their crucial role in ASHA's performance and motivation. It is supplemented by results of a study done by Sharma *et al.* which found that ASHAs' performance was said to be adversely impacted by their limited orientation on their own role, poor training on counseling and health promotion skills. Their morale and performance is also affected by lack of supportive supervision, poor service delivery at the village level due to the lack of staff at health facilities, and the absence of a grievance redressal mechanism.^[15] Thus improvements are needed in training content, to emphasize on role clarity, and counseling skills. Other measures like making surprise field visits to supervise and review ASHA's performance can be done.

This was a descriptive study which explored the knowledge and performance of ASHA workers in one of the largest CHWs programs in the world. The scientific evidence on ASHA workers knowledge and performance in maternal health aspect is limited. It helped in finding the loop holes in the training and supervision of ASHA workers as well. The possible remedial measures may be supportive supervision in the community so that it is ensured that knowledge is materialized to practices as well. Communication and problem solving skills should be included in their training so that they can overcome the problems faced by them in the community and gain the faith of community. Administrative problems should be addressed like shortage of staff, transportation facility, and money for emergency situations. The study can be replicated on a larger scale which can give important inputs for future relevant policy changes in India. Among the study limitations, small sample size is major one. Effectiveness of ASHAs performance was not assessed from the community's perspectives.

Conclusion

Present study showed that ASHAs knowledge is good but practices about maternal health were not adequate. However, representative study should be carried out to make generalization for findings. Guidelines should be followed strictly in recruitment and selection of ASHA workers. Training should be skills based and efforts should be made to remove the obstacles they are facing.

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