Original Article

Awareness and Practices of Accredited Social Health Activist (ASHA) Workers about Child Health: A Cross Sectional Study

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Abstract

Introduction: Use of community health workers as a strategy for improving the health of individuals and communities is increasingly getting attention worldwide. Accredited Social Health Activist (ASHA) has been introduced in National Rural Health Mission. Are they aware of what is expected from them for child health?

Objective: To assess the awareness and practices of ASHA workers regarding child health.

Materials and Methods: A descriptive cross sectional study was conducted in north east district of Delhi among 55 ASHA workers. Data was collected using a pre tested semi-structured questionnaire that consisted of items on socio-demographic profile of ASHA workers, and knowledge and practices about child health. The data was analyzed by using SPSS software version 17.

Results: Mean age of ASHAs was 31.84 ± 7.2 years. Most of them were married (96.4%) and Hindu (85.5%). Fifty two (94.5%) ASHA workers knew that exclusive breastfeeding should be continued till 6 months of age. 54 (98.2%) ASHAs were aware of their role of mobilizing children for immunization and 43 (78.2%) knew about their role in counseling mothers about child nutrition. Thirty seven (67.3%) ASHA workers reported that they used to visit the newborn in their area within a week of birth. None of the ASHA workers were provided with drug kits.

Conclusion: The present study showed knowledge is good in certain areas, but improvement is needed in other areas and skills and administrative support is needed to deliver child health services effectively.

Keywords: Community health workers, Child health, Breastfeeding.

Introduction

Health systems in many developing countries are too weak and fragmented to start and scale up essential interventions for newborn and child health.[1] One key challenge is the need to develop and strengthen human resources in sufficient number and with skills to deliver essential interventions.[2] The density of health workers (doctors, nurses, midwives) is inversely proportional to maternal, infant, and under-5 mortality.[3] Use of community health workers as a strategy for improving the health of individuals and communities has always been discussed worldwide.[4,5] Community Health Workers (CHWs) are generally members of a community, whose task is to improve the health of that community, often in cooperation with the healthcare system, or with national or international aid agencies. They advise the community on preventive strategies, gives advice on child care, healthy nutrition, immunization and hygiene, and provide first aid and limited curative services.[6] The CHWs enable access to and utilization of health services, and help to inculcate healthy behaviors among the communities. They are preponderantly deployed to cater to underserved populations and to address unmet health needs and demands.[7] Several African and south Asian countries are currently investing in new cadres of community health workers as a major part of strategies to reach the Millennium Development Goals of which child survival is one.[8]

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In India also, reduction of infant mortality rate and improving child health is one of the goals of National Health Policy 2002. The National Rural Health Mission (NRHM) was launched by the Government of India in 2005 to achieve the goals of National Health Policy 2002 and is one of the key initiatives to achieve the goals of Millennium Development Goals. NRHM envisages strengthening of public healthcare delivery system in India.[9] One main strategy of NRHM is provision of cadre of community health workers called Accredited Social Health Activist (ASHA). The ASHAs play a pivotal part in the whole design and strategy of the NRHM. ASHAs act as an interface between community and public health system. The ASHA is a female volunteer selected by the community, deployed in her own village (one in every 1000 population) after a short training. Roles and responsibilities of ASHA workers with regard to child health include counseling the mother for feeding and nutrition, assessment for malnutrition, home based management for minor illnesses like respiratory and diarrheal diseases with referral services if needed, to ensure complete immunization, pay home visits for newborn for breastfeeding, counseling and for assessment for general well being.[10]

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.

Materials and Methods

This was a cross sectional study carried out in Seelampur tehsil of north east Delhi district. ASHA workers recruited under NRHM, Delhi working in that tehsil constituted the study population. A total of 55 ASHA workers catering a population approximately 1,10,000 were selected. Study area and participants were chosen by using convenience sampling method since it was field practice area under Department of Community Medicine, Maulana Azad Medical College, New Delhi. Data was collected using a pre-tested semi-structured questionnaire in local language. Questionnaire consisted of items on socio-demographic profile of ASHA workers like age, educations status, religion, caste etc. Questions on knowledge and practices about child health like immunization, breastfeeding, home visits for newborn care etc. were included. Perception of ASHAs about their training regarding child health component was also assessed. The questionnaire was pilot tested before start of study for its reliability. Cronbach's alpha which is coefficient of reliability was calculated to be 0.81.

The data was analyzed by using SPSS software version 17. Qualitative data was 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 data was kept confidential and was used for research purpose only.

Results

Socio Demographic Profile

Mean age ($\pm$SD) of ASHAs was 31.84 $\pm$ 7.2 years. 8 (14.5%) ASHAs were less than 25 years, 31 (56.4%) belonged to age group of 25-35 years and 16 (29.1%) belonged to 35-45 years age group. 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 level. 3.6% ASHAs were unmarried. 16 (29.1%) belonged to scheduled caste (SC), 16 (29.1%) to other backward classes (OBC), and 21 (38.2%) to other castes and religions. Mean ($\pm$SD) population catered was 1891.85 ($\pm$384.27). 3 (5.5%) ASHAs were serving the population of more than 2000.

Knowledge of ASHA Workers about Child Health

Fifty two (94.5%) ASHA workers knew that exclusive breastfeeding should be continued till 6 months of age. 54 (98.2%) knew that breastfeeding should be continued in case of diarrhea also. ASHA workers were asked about the indications of referral for a child with diarrhea to health facility. Common responses of ASHAs were difficulty in breastfeeding (34.5%), presence of blood in stools (60%), drowsiness (43.6%) and non passage of urine in past 6 hours (30.9%). 15 (27.3%) did not have any knowledge of indications of referring a child in such condition as shown in Fig. 1. 53 (96.4%) subjects knew how to prepare oral rehydration solution (ORS) at home. 54 (98.2%) ASHAs were aware of their role of mobilizing children for immunization and 43 (78.2%) knew about their role in counseling mother about child nutrition.

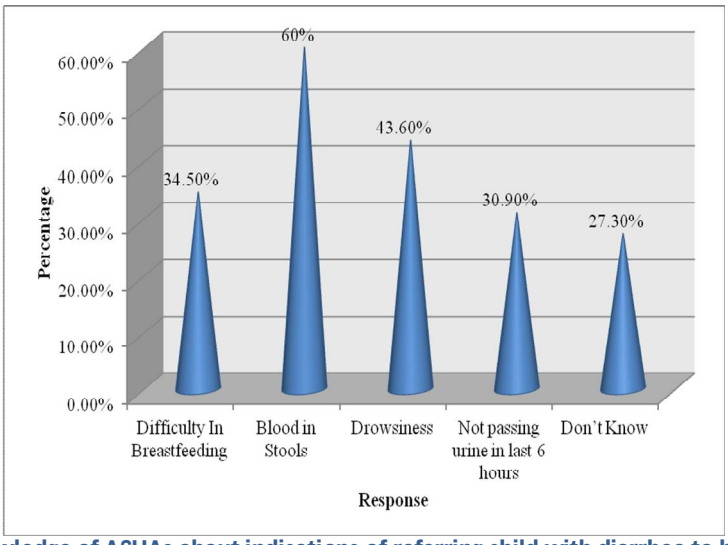

Figure 1.Knowledge of ASHAs about indications of referring child with diarrhea to health facility

Only 40 (72.7%) ASHA workers knew correctly about home based measures of making food energy dense for malnourished children. 11 (20%) had no knowledge about the same while 4 (7.3%) gave incorrect responses. About knowledge regarding immunization, all (100%) ASHA workers knew that measles vaccine is given at age of 9 months. About doses of DPT vaccine to be given in first year of life, only 37 (67.3%) ASHA workers knew the correct answer. Other responses were 2 doses (21.8%), 1 dose (7.3%) and 4 doses (1.8%) as shown in Fig. 2.

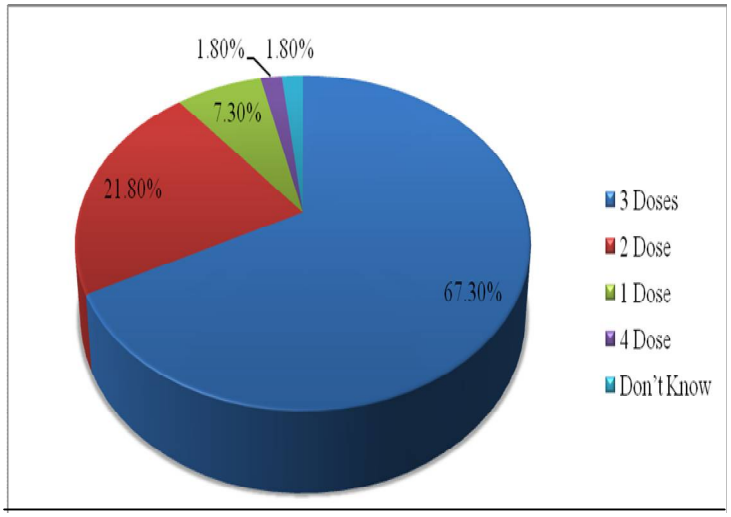

Figure 2.Knowledge of ASHAs about number of doses of DPT in infancy

They were asked if they know about indications for referral of a newborn child to health facility. Most commonly, ASHA workers knew of fever, convulsions and fast breathing as shown in Table 1. 46 (83.6%) ASHAs knew that combined contraceptive pills should not be given during lactation.

Indications	Positive response	Percentage (N= 55)
Poor sucking of breast	35	63.6
Fever	42	76.4
Convulsions	42	76.4
Fast breathing	42	76.4
Excessive drowsiness	40	72.7
Jaundice	41	74.5
Feels cold to touch	41	74.5

Table 1.Knowledge of ASHAs about indications of referring newborn to health center

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Practices of ASHA Workers in Delivering Child Health Services

Forty four (80%) ASHA workers reported that they *always* bring children for immunization to health center, 8 (14.5%) reported they *never* bring children while 3 (5.5%) used to bring children only *sometimes*. When asked about mobilizing the community in terms of bringing sick children to the health center for treatment, 23 (41.8%) reported that they *always* bring children, 14 (25.5%) told they never bring children while 18 (32.7%) said only *sometimes* they bring children. Only 37 (67.3%) ASHA workers reported that they used to visit the newborn in their area within a week of birth while 18 (32.7%) paid no visit to the newborn. About the number of home visits paid for newborn baby, mean (±SD) number of home visits were 3.53 ± 2.9. 54 (98.2%) ASHAs used to maintain immunization registers. None of the ASHA workers were provided with drug kits.

ASHA workers reported that they used to work 4.75 ± 1.5 hours a day. When asked about if they were able to understand the training module on child health, 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 on newborn care. 36 (65.5%) perceived the training to be complete, 5 (9.1%) felt it being incomplete, 4 (7.3%) felt training needs to be repeated while 10 (18.2%) perceived that too much information was being given in training sessions.

Discussion

The present study showed that guidelines were not strictly followed during selection and recruitment of ASHA workers in terms of age group (14.5% were below 25 years of age) and marital status (3.6% were unmarried). There should not be any discrepancies in recruitment guidelines and actual process since they have been laid down based on recommendations of experts and should be followed uniformly. Positive findings were adequate representation of minority communities and education status of ASHAs. Minimum education criteria is especially important to be met during selection and recruitment because it is reported that ASHAs with less than required education were seen as having limited capacity and knowledge to support their co-workers.[11]

Regarding knowledge about indications of referring a child with diarrhea, 27.3% had no knowledge of the same. 60% ASHAs knew about blood in stool as one of the indications of referral. These figures were lower than the figures reported in a study conducted by Shrivastava SR in Maharashtra in which 81% ASHAs knew about blood in stool as indication of referral.[12] This aspect is important because burden of dysentery is huge in India. ASHA workers should have a clear understanding of when and where they have to refer a child with diarrhea and dysentery. Positive findings were that about 96% of them knew that breastfeeding should be continued in diarrhea, and preparation of home based oral rehydration solution (ORS). Only 72.7% ASHA workers knew correctly about home based measures of making food energy dense for malnourished children. These findings are similar to those reported in a study conducted by Devi S in Imphal in which correct knowledge about breastfeeding was found in 93% of ASHAs and 64% knew about care to be given to a child with malnutrition.[13] Although all ASHAs knew about the correct age of giving measles vaccine, only 67.3% of ASHA workers knew correctly about the doses of DPT to be given in first year of life. This is consistent with the findings reported by Garg PK et al. in their study from Haryana. The study reported satisfactory knowledge about DPT vaccine only among 62% ASHA workers.[14] The knowledge gap about immunization has been reported in other studies as well.[15] This is an important aspect which needs attention since NRHM goals cannot be achieved without improving immunization services. Role of ASHA workers is vital in mobilizing the community for immunization services. They are unlikely to fulfill this responsibility if they themselves are not fully aware of immunization schedule.

It is essential that ASHA workers should have a clear idea of their roles and responsibilities about child health. Although 98% were aware of their role of mobilizing children for immunization, yet only 78.2% knew about their role in counseling mother about child nutrition. This gap could be a concern when we look at the prevalence of malnutrition in Indian children. ASHAs may play a significant role in counseling of mothers on nutrition during home visits. The ASHAs' performance is reported to be adversely impacted by their limited orientation on their own role and responsibilities. The limited role clarity amongst all and absence of accountability in ASHAs led to greater non-compliance and poor performance.[11]

Regarding newborn health, not all ASHAs were aware of the indications of referring a newborn to health facility. This is similar to findings of another study where 86.2% of ASHA workers had improper knowledge regarding newborn care and 86% were doing improper practice as they had poor knowledge regarding immediate referral condition.[16] 83.6% ASHAs knew that combined

contraceptive pills should not be given during lactation. However, this figure was better than that reported by a study conducted in Karnataka where only 43% knew about the same.

Practices

About 80% ASHA workers reported that they *always* bring children for immunization to health center. This is consistent with findings of another study where 80% ASHAs used to assist in immunization services in the area.[18] About home visits paid, only 67.3% ASHA workers reported that they used to visit the newborn in their area within a week of birth. Another study carried out in Uttar Pradesh by Kansal S found that 82% of ASHA workers used to visit newborns in the area.[19] In Delhi, ASHAs were recruited recently as compared to Uttar Pradesh which could be the reason of this difference. Data was collected about the training aspect on child health as well. Only 65.5% ASHAs perceived their training being complete regarding newborn health and about 85.5% responded that they *always* understand the module. This can be compared with the findings of a study by Jain N where 77% ASHAs retained breastfeeding content of their training, 23% about supplementary feeding and 77% about immunization.[20] Thus training quality needs to be looked into for ASHAs.

Conclusion

The present study showed that knowledge is good in certain areas, but improvement is needed in other areas in terms of knowledge and skills, and also in terms of administrative support to deliver child health services effectively. Retraining and refresher training on regular interval should be instituted to improve service delivery.

Conflict of Interest: None

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