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# SHORT COMMUNICATION

# Evaluation of trained Accredited Social Health Activist (ASHA) workers regarding their knowledge, attitude and practices about child health

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# ABSTRACT

**Introduction:** In India, with the introduction of Accredited Social Health Activist (ASHA) workers under the National Rural Health Mission (NRHM) from 2005 to 2006, utilization of healthcare services at the peripheral level has improved. This study was conducted with the purpose of evaluating knowledge, attitudes and practices of ASHA workers in relation to child health.

**Methods:** A cross-sectional study was conducted at Palghar Taluka in the Thane district of Maharashtra for a period of 3 months from January 2011 to March 2011, inclusive, with the study participants all being trained ASHA workers working in the various primary health centres of Palghar Taluka. A total of 150 ASHA workers were working in the area, of which four workers were untrained and thus excluded from the study. The study was conducted by the authors after receiving permission from the medical officer in charge of the primary health centres. Each of the ASHA workers was then contacted individually by the authors and had the study explained to them, after which they were interviewed face to face. Informed consent was taken from each of the study participants. A pre-tested semi-structured questionnaire was designed for ASHA workers regarding child health after thoroughly studying the ASHA Training Module 2, which was then translated into their local language (ie Marathi).

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**Results:** A total of 70 (47.9%) workers were from the under 25 years age group; 67 (45.9%) had received less than a secondary level education. A total of 67.1% of ASHA workers were not aware of the correct preventive measures for vitamin A deficiency. Twenty-nine (19.9%) of the ASHAs did not feel the need for referral for a child with diarrhoea who is unable to drink or breast feed. Similarly, in acute respiratory tract infections, 35 (23.9%) of ASHAs did not know to refer a child with fast breathing. Fifty-nine ASHAs (50.4%) considered a baby crying for more than 3 hours following immunization not worth referring to a first referral unit. The oral contraceptive pill was the most frequently advised temporary contraceptive measure for females in the reproductive age group (15-45 years).

**Conclusion:** Despite the training given to ASHAs, lacunae still exists in their knowledge regarding various aspects of child health morbidity. Monthly meetings can be used as a platform for the reinforcement of various aspects of child health. Periodical refresher training should be conducted for all of the recruited ASHA workers. In the future training sessions, more emphasis should be given to high risk cases requiring prompt referral.

Key words: Accredited Social Health Activist (ASHA) workers, Accredited Social Health Activist training module, India, National Rural Health Mission (NRHM), performance based incentives.

# Introduction

The National Rural Health Mission (NRHM) was launched by the Government of India on 12 April 2005 to carry out a necessary architectural correction in the basic healthcare delivery system and thus provide comprehensive integrated health care to rural people, especially the vulnerable sections of the society, namely, women and children<sup>1</sup>.

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<sup>2</sup>.

Accredited Social Health Activists have to undergo a series of modular training programs at the district hospitals / Block Primary Health Centres (PHCs) by the trained Taluka medical officer / district health officer. The ASHAs receive performance-based incentives for promoting universal immunization, referral and escort services for reproductive and child health (RCH) and other healthcare programs<sup>3</sup>.

With the introduction of ASHA workers under the NRHM from 2005 to 2006 in India, utilization of healthcare services at the peripheral level has improved<sup>4</sup>. Accredited Social Health Activist workers are supposed to increase the health awareness among women and also add to the resources of the health department<sup>4</sup>. According to a report released by the State Institute of Health & Family Welfare, Rajasthan, ASHA workers have brought an increase of 80.7% in institutional deliveries<sup>5</sup>. Research conducted in rural North India investigated contextual features of the program that hinder the ASHAs' capacity to increase quantitative health outcomes and found that ASHAs were institutionally limited by the outcome-based remuneration structure and poor institutional support<sup>6</sup>.

The basic rationale for conducting this study was to evaluate knowledge, attitudes and practices of ASHA workers in relation to child health so that proper interventions in the form of refresher training sessions could be undertaken to improve their knowledge in any deficient fields. Also, this study will help program managers in formalizing the future training sessions of newly recruited ASHA workers so they can focus on areas in which a knowledge–practice gap is identified.



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# Methods

A cross-sectional study was conducted at Palghar Taluka in the Thane district of Maharashtra, India for a period of 3 months from January 2011 to March 2011, inclusive, with the study participants all being trained ASHA workers working in the various primary health centres of Palghar Taluka. A total of 150 ASHA workers were working in the area, of which four workers were untrained and thus excluded from study.

The study was conducted by the authors after gaining permission from the medical officer in charge of the primary health centres, who introduced the authors to the ASHA workers at the time of their monthly meetings and also helped the authors to achieve rapport with the ASHA workers. A pre-tested, semi-structured questionnaire was designed for ASHA workers regarding child health after thoroughly studying the ASHA Training Module 2, which was then translated into the workers' local language (ie Marathi)<sup>7</sup>. Each of the ASHA workers was then contacted individually by the authors and after having the aim of the study explained, was interviewed face to face using the semi-structured questionnaire. Informed consent was taken from each of the study participants.

Each of the study participants was assured by the authors that the study findings would not have any impact on their job. The data were analyzed using SPSS v17 (www.spss.com).

#### Ethics approval

The Committee for Academic Research Ethics approved the study (#997/2010).

## Results

All of the ASHAs belonged to the local community and acted as effective link people in the delivery of health services and in providing health awareness. All of the study participants displayed the correct knowledge about advising pregnant women and their families regarding institutional deliveries; knew the correct advice regarding registration of birth; displayed correct knowledge regarding advising woman to undergo a minimum of three post-natal check-ups; and displayed correct knowledge regarding counselling exclusive breastfeeding for newborns.

It was also observed that 67 ASHA (45.9%) workers referred lactating mothers with complaints such as sore or cracked nipples or foul-smelling discharge from nipples to hospital, while 54 (37%) incorrectly advised breast massage with oil to the mothers. The oral contraceptive pill was the most commonly advised contraceptive measure, followed by an intrauterine device.

The socio-demographic profile of the ASHA workers is provided (Table 1). Out of the total 146 ASHA workers, 70 (47.9%) were below the age of 25 years. The minimum age of the ASHA worker was 17 years and the maximum age was 34 years. Sixty-seven (45.9%) of the ASHAs were educated below a secondary school level.

The ASHA workers' knowledge regarding danger signals in children requiring urgent referral is provided (Table 2). It was observed that despite training, 29 ASHAs (19.9%) did not feel the need to refer a child with diarrhoea who is unable to drink or breast feed. Similarly, in acute respiratory tract infections, 35 ASHAs (23.9%) did not know to refer a child with fast breathing. A total of 59 ASHAs (40.4%) considered a baby crying for more than 3 hours following immunization not worth referring to a first referral unit.

The preventive actions taken by the ASHAs for malnutrition and vitamin A deficiency is provided (Table 3). Only nine ASHAs (6.2%) did not know what to do for malnourished children. Though all ASHA workers were giving vitamin A as part of the immunization schedule, 71 ASHAs (48.6%) were unaware of preventive actions to be taken for Vitamin A.





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#### Table 1: Distribution of Accredited Social Health Activist workers according to sociodemographic parameters

Socio-demographic para	n (%)	
Age group (years)	< 20	16 (10.9)
	20-24	54 (37)
	25-29	44 (30.1)
	≥ 30	32 (21.9)
Education (class)	Primary (1-4)	13 (8.9)
	Middle (5-7)	54 (37)
	≥ Secondary (8-12)	79 (54.1)
Work experience (years)	< 2	75 (51.4)
	> 2	71 (48.6)
Total		146 (100)

# Table 2: Accredited Social Health Activist workers' knowledge of danger signals that indicate the need for immediate referral to a first referral unit

Condition	Danger signal	Knowledge			Total
		Yes (%)	No n (%)	Don't know n (%)	n (%)
Diarrhea	Child becomes lethargic	140 (95.1)	6 (4.1)	0	146 (100)
	Not able to drink or breast feed	117 (80.1)	15 (10.2)	14 (9.7)	146 (100)
	Blood in the stool	119 (81.5)	6 (4.1)	21 (14.3)	146 (100)
	Does not pass urine for 8 hours	124 (84.9)	15 (10.2)	7 (4.8)	146 (100)
Acute respiratory tract infection	Fast breathing	111 (76)	14 (9.6)	21 (14.3)	146 (100)
	Difficulty in breathing	130 (89)	4 (2.7)	12 (8.2)	146 (100)
	Unable to drink	120 (82.2)	17 (11.6)	9 (6.2)	146 (100)
	Lethargy	101 (69.2)	38 (26)	7 (4.8)	146 (100)
Fever	Unconsciousness	119 (81.5)	17 (11.6)	10 (6.8)	146 (100)
	Convulsions	133 (91.1)	0	13 (8.9)	146 (100)
	Child not able to drink	120 (82.2)	22 (15.1)	4 (2.7)	146 (100)
	Duration > 5 days	136 (93.2)	6 (4.1)	4 (2.7)	146 (100)
Immunization	Baby crying >3 hours	87 (59.6)	24 (16.4)	35 (24)	146 (100)
	High-grade fever	104 (71.2)	17 (11.6)	25 (17.1)	146 (100)
	Baby drowsy, convulsing or unconscious	116 (79.5)	23 (15.8)	7(4.8)	146 (100)



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Condition	Action	N (%)
Malnutrition	Make the child go daily to Anganwadi Centre	137 (93.8)
	Scheduledfeeding	22 (15.1)
	Dietary importance explained to parents	82 (56.1)
	Referral to PHC	6 (4.1)
	Don't know	9 (6.2)
Vitamin A deficiency	Dietary advice (green leafy vegetables etc)	25 (17.1)
	Oral vitamin A dose administration	38 (26)
	Vitamin A injection	6 (4.1)
	lodized salt	13 (8.9)
	Calcium tablet supplementation	8 (5.5)
	Don'tknow	71 (48.6)
PHC Primary h	ealth centre	

PHC, Primary health centre.

## Discussion

All of the ASHAs belonged to the local community and acted as effective link people in the delivery of health services and in providing health awareness. In the present study, it was found that approximately 50% of the ASHA workers were below the age of 25 years, contrary to the fact that as per guidelines, ASHAs should be in the 25-45 years age group<sup>2</sup>. Also, 67 (45.9%) of the ASHAs were educated below a secondary school level despite the requirement that ASHAs be educated to at least an 8th class standard<sup>2</sup>. In a study conducted in Surendranagar, 70% of the ASHAs had an education level that was between the 8th and 12th class, while in the present study it was approximately 54.1%<sup>8</sup>. Probable reasons could be low levels of literacy in the local area and a non-availability of educated women.

In the current study, 100% correct knowledge was observed regarding giving advice to pregnant women and their families about promoting institutional deliveries and accompanying pregnant women at the time of delivery. In contrast to this, in a rapid appraisal of the ASHA scheme in Uttar Pradesh, it was observed that 70% of institutional deliveries were motivated and facilitated by the ASHAs<sup>9</sup>. In a study carried out in Surendranagar, it was found that 86% of ASHAs were conducting improper practice as they had poor knowledge regarding immediate referral condition<sup>8</sup>, while in the present study it was observed that in acute respiratory tract infections, 35 ASHAs (23.9%) did not know to refer a child with fast breathing.

In the present study, 100% of the ASHAs helped Auxiliary Nurse Midwives (ANMs) in mobilizing beneficiaries at immunization sites, while in a study conducted in Gujarat, only 11.4% of the healthcare workers were working as mobilizers for immunization sessions<sup>10</sup>. Also, in a study conducted in Uttar Pradesh, 59% of the immunization activities were facilitated by ASHA workers<sup>9</sup>.

In a study conducted in Jharkhand, it was observed that only 5.7% of the study participants promoted community members to receive Integrated Child Development Services (ICDS) facilities from Anganwadi Centre, while in the present study 93.8% of ASHA workers advised parents of malnourished children to take them daily to the Anganwadi Centre<sup>11</sup>.

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In a study carried out in Orissa, approximately 78.9% of the beneficiaries of the Janani Suraksha Yojana (JSY) service said that ASHA workers prompted them to use the service<sup>12</sup>. In the current study, 100% of the ASHA workers displayed correct knowledge about the JSY service.

In a study undertaken in Rajasthan, it was observed that only 25% of the ASHA workers were aware of their responsibilities in helping ANM in the immunization program<sup>13</sup>, while in the present study almost 100% of ASHA workers were actually helping other healthcare staff in carrying out immunization services. In the Rapid Assessment of Communitization Processes of the National Rural Health Mission in Orissa, it was revealed that ASHAs felt that advising pregnant women on an institutional delivery was part of their prime agenda and they had not failed in that aspect<sup>14</sup>.

In the present study, 100% correct knowledge was observed regarding counselling the exclusive breastfeeding of newborns. In contrast to this, in a study conducted in Orissa it was observed that 81.3% of ASHA workers had knowledge about their responsibilities regarding counselling on antenatal care/ postnatal care, breastfeeding and immunization<sup>15</sup>. The current study had its limitations in that the quality of the training that the ASHA workers had received was not assessed and the possibility of recall bias cannot be ruled out.

## Conclusion

Despite the training given to ASHA workers, lacunae still persists in their knowledge regarding various aspects of 'child morbidity and mortality'. Training is the backbone of capacity building and functioning of ASHAs. Thus, it must be timely, proper and effective. It should be ensured during training that ASHAs are well aware of their job responsibilities. Monthly meetings should be used as a platform for regular reinforcement of various aspects of child health. In training sessions, more emphasis should be given to danger signals requiring referral and conceptual understanding of the reasons behind vitamin A supplementation.

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