

Assessment of Sahiyya (Accredited Social Health Activist) in Relation to Child Health in Ranchi, Jharkhand

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ABSTRACT

Background: Accredited social health activist (ASHA) is one of the key components of national rural health mission (NRHM) who can play an important role in identifying child morbidity at the earliest and help in improving their health status. **Objectives:** (1) To describe the sociodemographic profile of Sahiyyas (ASHAs) working in the field practice area of Ormanjhi, Ranchi, (2) to assess the knowledge of Sahiyyas regarding her job responsibilities related to child health, and (3) to assess their functioning related to child health practices by interviewing the beneficiaries. **Materials and Methods:** This was a community-based cross-sectional study. All Sahiyyas (26) and women having children under 3 years of age (196) in the study area were interviewed through pre-tested semi-structured questionnaire. Assessment of child health services delivered by ASHAs was done by interviewing these Sahiyyas, which was cross-checked by interviewing the beneficiaries. **Results:** Of 26 Sahiyyas, only 10 (38.5%) of them had the correct knowledge of oral rehydration solution (ORS) preparation and also had knowledge about homemade preparation of ORS and 16 (61.5%) of them could not tell the correct method of ORS preparation. Knowledge of Sahiyyas about pneumonia depicted that 16 (61.5%) could identify a child with pneumonia, but 10 (38.5%) had no idea about it. All the Sahiyyas (26) were aware about their job responsibilities regarding immunization such as listing of eligible newborn and children, counseling mothers for immunizing their child and mobilizing mothers to health center, and VHND camps. **Conclusion:** The study has pointed out that there are lacunae in knowledge of Sahiyyas regarding childhood illness and their referral. Thus, frequency and quality of training for Sahiyyas must be strengthened.


KEY WORDS: Sahiyya; Child Health; Pneumonia

INTRODUCTION

Jharkhand is predominantly a tribal state which constitutes a significant proportion (26.2%)^[1] of state's total population and is characterized by difficult geographical terrain with mostly hilly and hard-to-reach areas. The development of the health sector has not fared well either due to low health inputs,

lack of resources, and poor governance. To provide quality health-care services to the "last person in the last household of the last village" the Government of Jharkhand initiated a community-based approach - the Sahiyya Movement after a pilot in 2004 to encourage community participation in delivering quality health care to the needy and empowerment of women.^[2] After the launch of National Rural Health Mission (NRHM) in Jharkhand, the state preferred the word Sahiyya in place of accredited social health activist (ASHA) in its NRHM strategy (2006).^[3]

Around 9.2 million children die every year before reaching their fifth birthday. Most of these deaths occur in developing countries in which leading causes are as follows: Acute lower respiratory infections (mostly pneumonia: 19% of all deaths

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in under five), diarrhea (17%), malaria (8%), measles (4%), HIV/AIDS (3%), neonatal deaths - mainly preterm births, birth asphyxia, infections (37%), and injuries (3%). Poor or delayed "health-care seeking" contributes to 70% of child deaths.^[4] Activity of ASHA is one of the key components in the NRHM. They provide information to the community on determinants of health such as nutrition, basic sanitation, hygienic practices, healthy living and working condition, information on existing health services, and need for the timely utilization of health and family welfare services, and they are an important link between the community and health facilities.^[5]

Sahiyya (ASHA) can play an important role in identifying child morbidity at the earliest and help in improving their health status. On the other hand, if an ASHA could help the family decide whether the child can be managed locally with a drug kit or home remedies or should rush immediately - this simple skill could save tens of thousands of lives. Since ASHA is available at all times within the habitation, she could play this role best. Home visits and family counseling can make a huge difference in the prevention of malnutrition, anemia, and many common recurrent illnesses of children. They can play an important role in identifying problems at the earliest and help in improving community health status.^[6]

A Rapid Appraisal of Sahiyya in Jharkhand, under Rapid Assessment of Health Interventions (RAHI Project - Phase I) was conducted in the year 2007–2008 with support from United Nations Population Fund to assess the acceptability of Sahiyya and their functioning.^[7] After the RAHI project in Jharkhand, there was a need to assess her role in community once again as facilitator of child health services. The present study was an attempt to assess the level of knowledge of Sahiyyas regarding health and health aspects regarding child health and to assess their performance among the beneficiaries.

With this background, the present study was undertaken with the following objectives:

1. To describe the sociodemographic profile of Sahiyyas (ASHAs) working in the field practice area of Ormanjhi, Ranchi.
2. To assess the knowledge of Sahiyyas regarding her job responsibilities related to child health care.
3. To assess their functioning related to child health practices by interviewing the beneficiaries.

MATERIALS AND METHODS

The rural field practice area of the Department of Community Medicine, RIMS, Ranchi, is located in Ormanjhi block. There are 26 health sub centers in this block, out of which Irba, Chakla, and Anandi health sub centers constitute rural field practice area of the Department of PSM, RIMS. These three health sub centers cater health needs of around 16,600

people from 21 villages. A total of 26 Sahiyyas (ASHAs) working in the study area of Irba, Chakla, and Anandi were interviewed through pre-tested semi-structured questionnaire (based on the training module of ASHAs under NRHM), and informed consent was taken before data collection. The study was conducted for a duration of 4 months from February 2015 to May 2015.

The knowledge of Sahiyyas about features of common childhood illnesses such as anemia, malnutrition, diarrhea, pneumonia, and management of each illness along with feeding practices was assessed based on the questionnaire. The questionnaire for Sahiyyas was framed based on the training module/reading material for ASHA under NRHM. The working efficiency of Sahiyyas related to child health practices was cross-checked by interviewing the beneficiaries who were mothers of children under 3 years of age ($n = 196$). Template was generated in MS Excel sheet, and data analysis was done using SPSS software.

RESULTS

Of total 26 Sahiyyas, nearly half of Sahiyyas, 11 (42.3%) belonged to the age group of 32–37 years followed by 8 (30.8%) between 26 and 31 years of age and only 5 (19.2%) from 38 to 43 years of age. The minimum age group of Sahiyya was 22 years and maximum was 42 years. Most of them 21 (80.8%) had formal education of 8th standard and above and one was illiterate. As far as religion is concerned, nearly half of them 11 (42.3%) were Hindu, 9 (34.6%) were Muslim, and 6 (23.1%) belonged to Sarana religion [Table 1].

Of total 18 signs of newborn and child which needs referral listed in the questionnaire, 9 signs were enumerated by all the Sahiyyas which are listed below. Of 26 Sahiyyas, majority of them 20 (76.9%) admitted that fever as a sign of referral, followed by lethargy and yellow tinge of body which was responded by 16 (61.5%) Sahiyyas. Other signs enumerated by Sahiyyas were difficulty in breathing 10 (38.5%), poor breastfeeding 14 (53.8%), chest indrawing 10 (38.5%), fast breathing, convulsions, and lethargy. When asked to them about management of these signs, all of them answered that they would refer the child to health center [Table 2].

In the study, of 26 Sahiyyas, 14 (53.9%) agreed that they were able to identify child with anemia and 12 (46.2%) responded that they were unable to identify an anemic child. Of 14 Sahiyyas, 10 (71.4%) responded that eyes are examined to identify signs of anemia and 8 (57.1%) said that hands are to be examined to see for pallor. Around four Sahiyyas responded that both eyes and hands are to be examined to identify pallor. Further, when asked about management of anemia, 12 (85.7%) answered they would accompany or refer the child to sub center and 2 (14.3%) responded they would advise mothers for IFA and refer the child [Tables 3 and 4].

All the Sahiyyas (26) responded that they were able to identify a malnourished child. When enquired about signs of malnutrition, out of 26 Sahiyyas, all of them responded that visible severe wasting is a sign of malnutrition, 10 (38.5%) responded as swelling of feet, 11 (42.3%) had knowledge that abdominal distension as a feature, 12 (46.2%) about lethargy, and 2 (7.7%) responded as frequent cry and no play as features of malnutrition. The training module of Sahiyya 7A demonstrates the use of growth charts, but none of the Sahiyyas knew the utility of growth charts and grading of severity of malnutrition. When the management of a malnourished child was asked to them, 24 (92.3%) responded that they would refer the child to a health center and only

2 (7.7%) said they would counsel mothers for nutrition of child and then would refer the child to health center [Table 5].

All Sahiyyas (26) were aware about the identification of a child with diarrhoea. As far as knowledge about signs and symptoms of diarrhoea is concerned, all Sahiyyas (26) were aware that loose stools are a symptom; 17 (65.4%) said lethargy; 5 (19.2%) were aware if the child drinks eagerly; 10 (38.5%) about dry mouth being symptom; and 4 (15.4%) were aware about skin pinch test to be done to identify the severity of diarrhea. None of them could respond sunken eyes and blood in stool as features [Table 6].

Of 26 Sahiyyas, only 10 (38.5%) of them had the correct knowledge of ORS preparation and also had knowledge about homemade preparation of ORS and 16 (61.5%) of them could not tell the correct method of ORS preparation. As far as the management of child with diarrhea is concerned, 7 (26.9%) responded that they would manage the child by self by ORS preparation, 12 (46.2%) said they would advise

Table 1: Sociodemographic profile of Sahiyyas (n=26)

Sociodemographic variables	n (%)
Age group	
20–25	2 (7.7)
26–31	8 (30.8)
32–37	11 (42.3)
38–43	5 (19.2)
Total	26 (100)
Education	
Illiterate	1 (3.8)
Below 8 th standard	4 (15.4)
8 th standard and above	21 (80.8)
Total	26 (100)
Marital status	
Married	25 (96.2)
Widow	1 (3.8)
Total	26 (100)
Religion	
Hindu	11 (42.3)
Muslim	9 (34.6)
Sarana*	6 (23.1)
Total	26 (100)

Table 2: Knowledge of Sahiyyas related to signs of newborn and children which needs referral (n=26)

Knowledge about signs of newborn and child which needs referral*	Number of Sahiyya (%)
Fever	20 (76.9)
Feels hot/cold to touch	10 (38.4)
Stops feeding/poor sucking of breast	14 (53.8)
Difficulty in breathing	11 (42.3)
Baby becomes yellow on the 1 st day	16 (61.5)
Chest indrawing	10 (38.5)
Fast breathing	10 (38.5)
Convulsions	7 (26.9)
Lethargy	16 (61.5)

*Multiple response and open ended question

Table 3: Knowledge of Sahiyyas about identification of anemia and referral (n=26)

	Response	Number of Sahiyya (%)
Able to identify child with anemia	Yes	14 (53.8)
	No	12 (46.2)
	Total	26 (100)

Table 4: Identification of signs of anemia by Sahiyya (n=14)

Identification of signs of anemia by Sahiyya*	Number of Sahiyya (%)
Examine eyes	10 (71.4)
Examine hands	8 (57.1)
Management of case of anemia	
Advice IFA tablets and timely referral	2 (14.3)
Timely referral	12 (85.7)

*Multiple response

Table 5: Knowledge of Sahiyyas about signs and symptoms of malnutrition (n=26)

Features of malnourished child*	Number of Sahiyya (%)
Visible severe wasting	26 (100)
Swelling of feet	10 (38.5)
Abdominal distension	11 (42.3)
Lethargy	12 (46.2)
Others (frequent cry, no play)	2 (7.7)
Management of malnourished child	Number of Sahiyya (%)
Nutrition counseling and timely referral	2 (7.7)
Referral to health center	24 (92.3)
Total	26 (100)

*Multiple response

the mothers to prepare ORS and then refer the child, and 7 (26.9%) responded that they would directly refer the child to nearest PHC/SC [Table 7].

Of 26 Sahiyyas, 16 (61.5%) responded they could identify a child with pneumonia, but 10 (38.5%) had no idea about it. Of 16 Sahiyyas who responded that they were able to identify a child with pneumonia, cough as a symptom was responded by 14 (87.5%) Sahiyyas, fever by 12 (75%), and rapid breathing and chest indrawing by 10 (62.5%). When asked about the management of a child with pneumonia, none of them could respond about home management. All 16 of them responded they would refer the child to health center. This is matter of concern to note that still 10 (38.5%) Sahiyyas have no knowledge about identification and management of pneumonia [Table 8].

All the Sahiyyas (26) in the study were aware about their job responsibilities regarding immunization activities. All were aware that they had to make list of eligible newborn and children, counsel mothers for immunizing their child and mobilize mothers to health center, and VHND camps. One of the reasons may be that this job of her is incentivized which leads to paying more attention to it rather than making home visits to identify and refer newborn problems and childhood illness to the health center [Table 9].

Of 196 beneficiaries, only 75 (38.3%) responded that Sahiyya makes home visits to identify and refer for childhood illnesses and rest 121 (61.7%) responded no visits made by Sahiyya for child care. Of 75 women who responded Sahiyya makes home visits, they all said that Sahiyya enquires about general health condition and presence of fever and diarrhea if any in case of children. The beneficiaries responded that whenever their child develops any problem, the first point of contact is ANM at the health center or nearest hospital. One of the reasons for Sahiyya not being the first point of contact was that they had no common medicines with them have at the time of need [Table 10].

DISCUSSION

Activity of ASHA is one of the key components in the NRHM and can play an important role in identifying child morbidity at the earliest and help in improving their health status.^[4] In the present study, out of 26 Sahiyyas, half of them (50%) had poor knowledge about individual signs and symptoms of common childhood illness such as anemia, diarrhea, malnutrition, and pneumonia. Their knowledge about danger signs of newborn and children which needs immediate referral was also not up to mark. The opportunity to provide appropriate care is lost by most of the Sahiyyas due to lack of their skills and non-availability of drugs with them at the time of demand. However, most of them were aware that timely referral should be advised to mothers for the treatment of these childhood illnesses. None of the

Table 6: Knowledge about signs and symptoms of diarrhoea in children (n=26)

Signs and symptoms of diarrhoea identified by Sahiyya*	Number of Sahiyya (%)
Loose stools	26 (100)
Lethargy	17 (65.4)
Drinks eagerly	5 (19.2)
Dry mouth	10 (38.5)
Drinks poorly	0
Sunken eyes	0
Blood in stools	0
Any others (skin pinch test)	4 (15.4)

*Multiple response

Table 7: Response of Sahiyyas regarding management of child with diarrhoea (n=26)

Knowledge of correct preparation of ORS	Number of Sahiyya (%)
1 packet ORS in 1 l water	10 (38.5)
Wrongly said	16 (61.5)
Total	26(100)
Management of child with diarrhea	Number of Sahiyya (%)
Self-management by Sahiyya by only advising ORS	7 (26.9)
Advice mothers for preparation of ORS and refer	12 (46.2)
Referral to health center	7 (26.9)
Total	26 (100)

Table 8: Knowledge of Sahiyyas regarding identification of signs, symptoms, and management of pneumonia in children

Able to identify pneumonia	Number of Sahiyya n=26 (%)
Yes	16 (61.5)
No	10 (38.5)
Signs and symptoms identified by Sahiyya*	Number of Sahiyya n=16 (%)
Fever	12 (75)
Cough	14 (87.5)
Rapid breathing	10 (62.5)
Chest indrawing	10 (62.5)
Management of child with pneumonia	Number of Sahiyya (%)
Home management	0
Timely referral to health center	16 (100)

*Multiple response

Sahiyyas could respond to home management of pneumonia if any case is found in their area. Sahiyyas also said that they were not supplied with drug kits with medicines for common ailments. Whenever the beneficiaries are in need of medicine, they avail medicines to them from ANM at the health center.

Table 9: Knowledge and practices of Sahiyyas regarding immunization activities (n=26)

Variables	Number of Sahiyya (%)
Making list of eligible newborn and children	26 (100)
Counsel mothers for immunizing their child	26 (100)
Mobilization to health center and on VHND camps	26 (100)

Table 10: Response of women regarding home visits conducted by Sahiyyas to identify childhood illnesses (n=196)

Home visits of Sahiyya for childhood illnesses	Number of women having children under 3 years of age (%)
Yes	75 (38.3)
No	121 (61.7)

As far as job responsibility regarding immunization is concerned, this job is done enthusiastically by Sahiyyas, the reason being it is incentivized. Immunization of the child is a component where mostly all the beneficiaries responded that Sahiyya reminds them a day before attend VHND camps for routine immunization of their children.

In a study conducted by Mohapatra *et al.*,^[8] in Varanasi, to assess ASHAs reported that majority of the ASHAs (91.9%) emphasized on non-discontinuation of breastfeeding for the baby during such episodes. ORS should be given to the baby was the opinion of 81.5% ASHAs, while 64.7% advised home available fluids in the form of porridge, *dal* water, etc. Another 7.5% suggested the family to feed homemade fluids to the baby during the episodes. No advice is given by 8.7% (15) of the ASHAs in such situations. Another study conducted by Mahyavanshi *et al.*^[4] in Surendranagar district who assessed knowledge, attitude, and practices of ASHAs regarding diarrhea in children reported that 91.5% and 55.38% had poor knowledge regarding signs of dehydration and preventive measures, respectively. Thus, to enhance the skill development of ASHAs in the area of newborn and child care additional training has been recommended by Stalin *et al.*^[9] in his study. Knowledge of ASHAs about signs and symptoms of pneumonia was also studied by Mahyavanshi *et al.*^[4] where 81.5% and 86.1% had poor knowledge about signs/symptoms and primary treatment of pneumonia.

All the Sahiyyas (26) in the study were aware about their job responsibilities regarding immunization activities. Similar observations were reported by Kumar *et al.*^[10] and Garg *et al.*^[11] where in both the studies 100% ASHAs were involved in mobilizing mother and children for immunization, and this shows that ASHAs were doing incentive-oriented practices more. These are contrary to the findings of Jain *et al.*^[12] who reported that more than half of the children (51.9%) were

unimmunized, only less than one-third of the children (31%) were fully immunized. As far as ASHAs knowledge about immunization was concerned, their overall response was poor immunization in a study conducted by Waskel *et al.*^[13]

CONCLUSION

Training is the backbone of capacity building and functioning of Sahiyyas. Knowledge of Sahiyya as well her skill's needs to be strengthened in the field of maternal and child care. The study has pointed out that there are lacunae in knowledge of Sahiyyas regarding childhood illness and their referral. Thus, trainings should be conducted timely with periodic refresher trainings imparted to sensitize Sahiyyas about their roles and responsibilities on child care. The trainings should also focus on motivating her to conduct home visits regularly.

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