

Assessing the Role Perception of Accredited Social Health Activists (ASHA) in delivering Primary Healthcare Services: A Cross-Sectional Study in Delhi, India

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Abstract:

Accredited Social Health Activists (ASHAs), introduced in 2005 under the National Rural Health Mission (now National Health Mission) have seen their roles expand over the years to meet the evolving health needs of communities. This study aimed to assess their role perception regarding the delivery of primary healthcare services in Delhi. A descriptive cross-sectional study was conducted among 200 ASHAs from four districts using a pre-tested, structured, self-administered questionnaire. Data on socio-demographic characteristics and role perception were collected and analysed using Microsoft Excel 365, GraphPad Prism 8, and IBM SPSS version 25.0, with the Chi-Square test applied to examine associations between the two. Among the ASHAs, 49.5% were aged 40–49 years, 86.5% were married, and 37% had at least a higher secondary education. The majority belonged to the OBC category (37%) and were Hindu (94%). Nearly half (48%) had a monthly family income between ₹10,000–₹20,000. Regarding role perception, 89% had a moderately positive attitude, 10% had a very positive attitude, and 1% showed a slightly negative attitude. Education level was found to have a significant association ($p = 0.006$) with role perception. While most ASHAs demonstrated a positive attitude toward their responsibilities, gaps—particularly in their understanding of their role as DOTS providers—were noted, suggesting a need for regular, high-quality training and continuous capacity-building efforts.

Keywords: ASHA, Role Perception, work attitude, primary healthcare

INTRODUCTION

ASHA was introduced as key component of community processes in National Rural Health Mission (NRHM) in 2005. ASHA is a woman health volunteer from the community preferably of age 25-45 and education of secondary level at least. One ASHA is expected to serve a population 1000-2000 depending on the geography. She is to undergo minimum 23 days of training spread across the first year of her service and 15 days of refresher training every following year on 7 user-friendly modules carefully curated for them.¹ ASHA programme was conceptualized as a community-based intervention aimed at bridging the gap between formal healthcare systems and rural communities by leveraging the strengths of local community members and focused on empowering women from marginalized and underserved communities to serve as change agents within their communities, addressing key health issues such as

maternal and child health, family planning, immunization, and nutrition. Their roles have since expanded to cater to every health aspect of the community be it communicable or any non-communicable diseases, attending community health meetings or mobilizing people to raise awareness on health etc. Their efforts in the COVID 19 pandemic also have been well documented and greatly appreciated.² Moreover ASHAs play a crucial role in implementing various community health programs, especially in rural and remote areas. Studying their role perception can help understand them better and assess the effectiveness of the quality of service they provide.

The present study was done for a period 1 year, 6 months (August 2022-February 2024) to assess role perception (attitude) of ASHA in provision of primary healthcare services in Delhi.

OBJECTIVES

1. To describe socio-demographic profiles of ASHAs
2. To find out the role perception of ASHA regarding their roles and responsibilities.
3. To assess the association between socio-demographic parameters of ASHAs and their role perception in delivering primary healthcare services.

METHODS

This study was a descriptive cross-sectional study. Multistage random sampling technique was applied. Out of 11 districts in Delhi, 4 were selected using lottery method. Further, 3-4 primary health centre level health facilities were randomly selected from each district until a sample size of 50 ASHAs were reached from each district, ultimately totalling to 200 ASHAs.

The sample size was calculated using the formula $n = Z^2P(1-P)/d^2$, where P, the expected proportion of the population having correct knowledge regarding primary healthcare services, was taken as 50% based on a study conducted in Madhya Pradesh in 2021³, and d, the absolute precision, was set at 7%.

Thus, using this formula $n = 1.96^2 \times 50\% (1-50\%) / (7\%)^2 = 196$, which was rounded upto 200. Hence, 200 ASHAs were considered for the study.

Inclusion criteria:

- ASHA who has completed their essential training.
- ASHA willing to participate in the study.

The data was collected using pre-tested, structured, self-administered questionnaire tool. It contained items on sociodemographic profile of ASHA and on their Role perception (Attitude). 2 Point Likert scale was used to assess the Role perception of ASHA. It contained 20 simple statements for which they were asked if they 'Agree' or 'Disagree' with the statement. There were both positive and negative statements. Scores were allocated to each response. Meaning and score allocated to each are as follows:

Agree: Denotes that they agree or support the statement.

Disagree: Denotes that they don't agree with the statement.

Appropriate response= 1 point (for e.g., to agree with the given statement that is positive)

Inappropriate response= 0 point (for e.g., to disagree with the given statement that is positive)

Score of 15-20= Very positive attitude

7-14= Moderately positive attitude

>7= Slightly negative attitude

To determine the association between socio-demographic parameters of ASHAs and their role perception in delivering primary healthcare services, the Chi-Square test of independence was employed. This test

was used to analyze categorical variables and assess whether there was a significant relationship between socio-demographic factors (such as caste, religion, monthly family income, and education level) and ASHAs' attitudes toward their role. A **p-value < 0.05** was considered statistically significant.

The tool was translated in Hindi language. Written consent was obtained from the study participants. Data was analyzed using Microsoft excel 365, GraphPad software version Prism 8 and IBM SPSS software version 25.0. The study was approved by Institutional Ethical Committee.

RESULTS

1. Socio-demographic background of ASHA

Table 1: Socio-demographic background of ASHA

Socio-demographic parameter	Group	n (%)
1. Age group	< 30 years	7 (3.5%)
	30-39 years	75 (37.5%)
	40-49years	99 (49.5%)
	50 and above years	19 (9.5%)
2. Marital Status	Unmarried	12 (6%)
	Married	173 (86.5%)
	Separated	4 (2%)
	Widowed	11 (5.5%)
3. Education level	Primary	27 (13.5%)
	Secondary	71 (35.5%)
	Higher secondary	74 (37%)
	Graduate	28 (14%)
4. Caste	General	73 (36.5%)
	OBC	74 (37%)
	SC	53 (26.5%)
5. Religion	Hindu	188 (94%)
	Muslim	12 (6%)
6. Monthly family income	< 10k	47 (23.5%)
	10k-20k	96 (48%)
	21k-30k	50 (25%)
	>30k	7 (3.5%)
7. Population served	<1000	1 (0.5%)
	1000-1500	13 (6.5%)
	1501-2000	93 (46.5%)
	>2000	93 (46.5%)
8. Duration since last training	<1 week	83 (41.5%)
	1week-1month	81 (40.5%)
	>1 month	36 (18%)

In the group of 200 ASHAs interviewed in the present study the mean age was found to be 41 years (approx.). Majority of them were married (86.5%). Most of them had secondary (35.5%) to higher secondary (37%) level of education. 37% of them belonged to OBC caste while 36.5% belonged to General caste. More than 90% of them were Hindu and only 6% were Muslim. Around 50% of the ASHAs declared their monthly family income to be between 10k-20k. Population served per ASHA was mostly 1501-2000 (46.5%) and more than 2000 (46.5%). More than 80% had some kind of training in the last 1 week (41.5%) or in the period between 1 week to 1 month (40.5%).

2. Role perception (Attitude) of ASHAs delivering Primary healthcare.

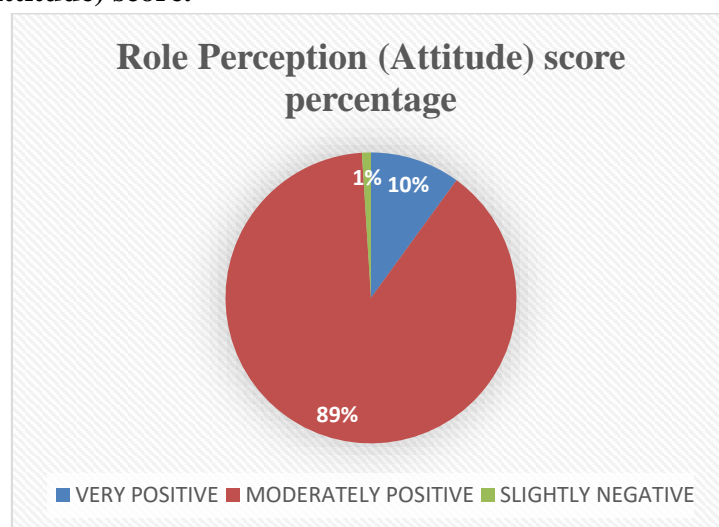
Table 2: Role perception (Attitude) response summary

Role perception	Disagree	Disagree %	Agree	Agree %
I believe every house should have pucca toilets	2	1.00%	198	99.00%
I feel forming Mahila Arogya Samiti is beneficial for the community	4	2.00%	196	98.00%
I feel the ANMs do not require my help in immunization activities	162	81.00%	38	19.00%
I feel providing treatment for small cuts is only Doctors job	174	87.00%	26	13.00%
I believe news of disease outbreak must be immediately informed in the PHC	21	10.5%	179	89.50%
I feel mothers do not require counselling on breastfeeding	177	88.5%	23	11.50%
I believe accompanying pregnant women to hospital is helpful for them	18	9.00%	182	91.00%
I feel only women should take contraceptive measures	183	91.5%	17	8.50%
I think birth registration is very important	7	3.5%	193	96.50%
I think home visit after delivery is not necessary	176	88.00%	24	12.00%
I believe breast milk provides immunity to the child	9	4.5%	191	95.50%
I feel ORS should be given to every newborn child who passes stool more than 2 times a day	154	77.00%	46	23.00%
I think reminding mothers about immunization schedule is very important	15	7.5%	185	92.50%
I feel people suffering Leprosy should not visit public hospital	177	88.50%	23	11.50%
I feel boys cannot have anemia	168	84.00%	32	16.00%
I feel girls on periods should not go to school	185	92.5%	15	7.50%

Role perception	Disagree	Disagree %	Agree	Agree %
I feel people with mental illness should be left alone at home	197	98.50%	3	1.50%
I feel people require my help in choosing family planning method	9	4.5%	191	95.50%
I feel people suffering from TB should get their own medicine from PHCs	30	15.00%	170	85.00%
I feel all obese person should get their blood pressure and blood sugar level checked	16	8.00%	184	92.00%

More than 90% of the study participants correctly agreed that every house must have pucca toilet, reminding mother about immunization schedule is very important, that an obese person should get their blood pressure and blood glucose level checked regularly, people in the community require ASHAs help in choosing family method, breast milk provides immunity to new-born and that maintaining birth registry is very important. However, 85% of them believed a person suffering from TB should get their own medication from health facilities, rather than ensuring supervised treatment. 19% believed ANMs didn't require their help in conducting immunization days. 16% of them believed boys cannot suffer from anemia. 23% also incorrectly believed that ORS should be given to every child passing stool more than 2 times in a day.

3. Role perception (Attitude) score.



Assessment of role perception revealed that the majority 178 (89%) had moderately positive attitude, 20 (10%) had very positive attitude and only 2 (1%) persons had slightly negative attitude.

4. Association between socio-demographic parameters of ASHAs and their Role perception (Attitude) in delivering primary healthcare: Chi-square test results.

Socio-demographic parameters	p-Value	Statistical significance
Caste	0.999	No significant association
Religion	0.868	No significant association

Family income	0.570	No significant association
Education level	0.006	Significant association

Education level shows a statistically significant association ($p < 0.05$), while caste, religion, and family income do not have a significant impact on ASHAs' role perception in delivering primary healthcare services.

DISCUSSION

Fatima et al. (2015)⁴ in their study showed similar findings on the assessment of ASHA workers. They highlighted that nearly 95% (274/291) of them were in the age-group of 20-39 years; mean age being 30.3 ± 5.0 years, which was found to be 41.11 ± 6.29 years in the present study. About 90% (261/293) were currently married women close to the finding of the present study i.e., 86.5%. An overwhelming majority (97%) were Hindus, close to the finding of this study where 94% participants were Hindus. But unlike the present study, majority of ASHAs (59%) were from households with income of 1,000 to 3,000 Indian Rupees (INR) per month.

In a study conducted in Bengal⁵ it showed that majority (98.9%) of ASHA workers were in the age group of 40-50 years. Most of them (64.7% and 52.6 %) were Muslim and belonged to OBC caste respectively, unlike the finding of the present study where only 6% were Muslims and only 37% belonged to OBC caste. All the ASHA workers completed at least secondary education or more of schooling whereas in the present study, 35.5% completed their secondary level education, 37% higher secondary, and 14% were even graduates. Most of the ASHA workers (76.3% and 43.7%) used to serve a population of 1000 to 1200 respectively much less compared to population served by each ASHA in Delhi. The study site and population were the prime reason for the difference in terms of the religion of the ASHA workers.

In other study from a Karnataka⁶, it showed that out of 617 ASHA workers evaluated, maximum number of them were from the age group 30-39 (52.4%), unlike the present study that found only 37.5% participants in this category. The mean age of the study subjects in the given study was 30.67 ± 4.65 while the present study found the mean age to be 41.11 ± 6.29 years. Majority of ASHAs were married (68.6%) much less than the findings of the present study which was 86.5% and nearly 32% were either separated or widowed much higher than 2% separated and 5.5% widowed found in the present study. 95.8% ASHAs were Hindus, concurrent with the findings (94% Hindus) in the present study.

Role perception (Attitude) of ASHA

Analysis of role perception revealed that the majority (178, 89%) held moderately positive attitudes, while 20 (10%) displayed very positive attitudes, and only 2 (1%) exhibited slightly negative attitudes. They displayed positive attitude with over 90% of participants correctly recognized the importance of various health practices, such as ensuring every household has a pucca toilet, reminding mothers about immunization schedules etc. However, they displayed negative attitude regarding DOTS as 85% believed that individuals suffering from tuberculosis should obtain their medication from health facilities, which undermines the importance of their role as DOTS provider.

In the present study 97.5% ASHA appropriately disagreed that people with mental illness should be left alone at home. Similarly, a Gujarat based study⁷ found ASHAs did not support isolating people with mental illness from the society. They had conducted the study using *CAMI Scale – Gujarati Version* which was derived from the original CAMI scale developed by Taylor et al.⁸

A Karnataka based study⁹ revealed the overall attitude of ASHAs was favourable (82.4%) towards creating awareness on Oral cancer as they believed it as their responsibility in disease prevention (53.9%). The

study also showed that some of them (27.3%) would take up the task if their authorities instruct. Some of the ASHA also expressed the desire to do so for their people irrespective of incentives and time constraints but because people trust them (51.4%).

Other study conducted in 6 districts each in Gujrat and Andhra Pradesh¹⁰ showed that majority of ASHAs reported that patients hold negative attitudes towards counselling on tobacco cessation. They equated this to ASHAs having less knowledge about the importance of counselling in quitting substances. It also revealed about 33% of ASHAs believed that for some people tobacco consumption is a cultural practice. A study conducted in Rajasthan revealed ASHAs having poor attitude (80%) regarding DOT. Only 16.8% of ASHAs were aware about the DBT Nikshay Poshan Yojana and Only 10% of ASHAs included interviewing other family members of patients during home visits. Also 77.9% of them had trouble filling DOTS form.¹¹

In the present study, the Chi-Square test revealed a significant association between ASHAs' education level and their role perception ($p = 0.006$), while caste, religion, and monthly family income showed no significant relationship. The lack of association with other socio-demographic factors suggests that ASHAs' role perception may be influenced more by training, experience, and support systems rather than inherent social or economic backgrounds. Therefore, aiding in improving role perception of ASHAs regarding provision of primary healthcare services will surely be beneficial in improving the quality of service delivered by ASHA, consequently in realizing our public health goals. Providing proper support system, medical supplies, timely payment of incentives all may help in doing so. Appropriate sensitization regarding various public health issues may go long way in creating positive connection between ASHAs and the people of her community.

RECOMMENDATIONS

To enhance the role perception of Accredited Social Health Activists (ASHAs) in providing primary healthcare services, following recommendations may be considered.

1. Training and Education: Ensure regular and quality comprehensive training programs for ASHAs to enhance their knowledge and skills in various aspects of primary healthcare.
2. Empowerment: Empower ASHAs by giving them decision-making authority and recognizing their contributions to the healthcare system. Ensure that they have the necessary resources and support to effectively carry out their roles.
3. Community Engagement: Encourage ASHAs to actively engage with community members to raise awareness about health issues, promote healthy behaviours, and facilitate access to healthcare services. Foster partnerships with local community leaders and organizations to strengthen the reach and impact of ASHAs.
4. Supervision and Support: Provide regular supervision, mentoring, and feedback to ASHAs to ensure the quality and effectiveness of their work. Establish support systems to address challenges and promote professional development.

CONCLUSION

The current study findings indicate that Accredited Social Health Activists (ASHAs) in Delhi generally exhibited a positive attitude toward their role in delivering primary healthcare services. However, areas requiring improvement include sensitizing ASHAs about their responsibilities as DOTS providers, addressing anemia, and promoting the proper use of ORS. Notably, education level showed a significant

association ($p = 0.006$) with role perception, emphasizing the need for capacity building through regular training and skill enhancement programs. Strengthening ASHAs' knowledge and confidence in their roles will improve healthcare delivery at the grassroots level, ultimately leading to better health outcomes for the community.

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