

ASSESSING THE EFFECTIVENESS OF TRAINING AND POST-TRAINING SUPPORTIVE MECHANISM FOR ACCREDITED SOCIAL HEALTH ACTIVIST (ASHAS): A DISTRICT-LEVEL OBSERVATIONAL STUDY IN MAHARASHTRA

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ABSTRACT

Introduction: The Government of India launched the National Rural Health Mission (NRHM) to strengthen the Healthcare infrastructure to achieve the goal of promoting access to healthcare at the household level through the creation of a cadre of ASHA (Accredited Social Health Activists). The study aimed to assess the extent of capacity building and post-training supportive mechanisms for ASHA Method: A cross-sectional observational study was undertaken in Primary health centres of Thane District in Maharashtra, India, between September 2018 to May 2019. Five Primary Health Care centers were randomly selected from the District. Approximately 30 ASHAs worked under each PHC. From Each PHC, 15 ASHA workers were randomly selected, i.e. 50% of the total number of ASHAs using a simple random sampling technique. A sample size of 75 was taken. A semi-structured questionnaire was administered to the participants via a face-to-face interview after taking their informed consent. **Results:** It was observed that the majority of the ASHA workers scored more than 8 points about ANC care (66.7%), 56% scored a perfect 10 with regard to PNC care while 48% scored 10 points with regard to other roles and responsibilities of ASHA. Attending refresher training and >12 meetings per year with ASHA facilitators had a statistically significant positive effect on improving the performance of ASHA. **Conclusion:** The frequency of meetings with ASHA facilitators was inconsistent as per NRHM guidelines. ASHAs had adequate knowledge about their roles & responsibilities, ANC care, and PNC care as most scored satisfactory to good score during the assessment.

Keywords: Accredited Social Health Activist, Healthcare, National Rural Health Mission

INTRODUCTION

The success of public health measures hinges on how the services reach at the grassroots level. Merely professionals and other officials are many a times inadequate to do so. In India which has a gross disparity in terms of doctor-to-patient and nurse-to-patient ratios this challenge becomes even more difficult. To tackle this issue the concept of community health workers emerged in the late 19th and early 20th century. (Witmer,1995) Many countries implement such Community Health worker(CHW) programs where the workers are addressed by different names, e.g. in Mozambique they are called Activista, in Bangladesh Shashthya Shebika, Pakistan, Lady Health Worker, Malawi Health Surveillance Assistant, Brazil Visitadoras etc.(Bhattacharya,2001)On the same lines in India, recommendations were made for the formation of such CHW cadre by the 1975 Srivastava Committee following which the Government of India introduced the CHW program in 1978 which was later renamed as Village Health Guide Program in 1981.(MOHFW,1975) The Govt of Chhattisgarh in partnership with civil society launched the Mitandin program in 2002, which served as a model for the ASHA Program. (MOHFW,2011) With the launch of the NRHM in 2005, the ASHA program was also launched. The ASHA was envisaged to work as a link worker, a community health worker, and as a health activist. (NHSRC,2013)

ASHA does not undergo any professional course for acquiring knowledge and skills, neither does she need an assessment before her appointment. And the fact that she has no higher formal education does influence the learning curve. In this way, ASHA's training process plays a crucial role in her ability to perform a variety of assigned roles. It has been observed in various studies that the effectiveness of ASHA workers largely depends on the training and support from both the health system and the community (Swain,2008) (Deka, 2014) (Prasot, 2014)(Guha I ,2018)(Kumar,2017).

Since the launch & implementation of NRHM, ASHAs have been recruited and trained, few scientific documentation is available pertaining to the capacity-building and effectiveness of supportive mechanisms for ASHAs. (Sharma,2014)(Dholakia, 2011)(Jaskiewicz,2012)(Sarin,2016)(Henderson,2008)

Hence, this study was undertaken to assess the knowledge, training process & supportive mechanism for ASHAs considering its crucial effect on the performance of ASHAs.

METHODS

The present study was a cross-sectional observational study, conducted with the area of five primary health centres of Thane District in Maharashtra, India between September 2018 to May 2019. ASHA workers who were presently working in Thane District were the study participants. The evaluation mechanism depends on post-training provisions of essential materials regular meetings training sessions conducted etc. to assess these points direct interview of the participants was conducted.

Sample size and sampling method:

A simple random sampling technique was used. Five PHCs were randomly selected from Thane District (from 52 PHCs) for the purpose of this study. Approximately 30 ASHAs worked under each PHC. From each of these PHCs, 15 ASHA workers were selected using simple random sampling i.e. 50% of the total number of ASHAs from each PHC. (No. of ASHA per selected PHC – PHC1 – 33, PHC 2 – 42, PHC3 – 28, PHC4 – 35, PHC5 – 30)

Considering 15 ASHAs from each of the 5 PHCs, the total no of ASHAs taken for the study was $15 \times 5 = 75$.

Inclusion Criteria were ASHA workers who were presently working in Thane District, and those ASHA workers who had completed the induction training process. While exclusion Criteria ASHA workers who didn't report for duty for 1 month or more and those who were seriously ill were excluded.

Study tool and Data collection:

The study was conducted over a period of 18 months. Informed consent was taken from the participants. Data was collected using a semi-structured interview schedule administered via a face-to-face interview with the participant. Assessment of training was done according to the induction, maternal and child health, and refresher training sessions attended by the ASHA. Post-training support was assessed in terms of particulars available in the equipment kit, drug kit, monetary incentives received, and record keeping. Knowledge of ASHA related to her roles and responsibilities was assessed under the headings of ANC, PNC, and other roles and responsibilities, 10 questions pertaining to the ANC & PNC domain were asked with the right answer being scored 1, while 5 questions pertaining to other roles and responsibilities with each correct answer scored 2. No negative marking was used. The scores were categorized as 1-5 being Poor, 6-7 being Satisfactory, and 8-10 being Good. In the present study, a checklist provided for the assessment of functionality/performance of ASHA in the NRHM guidelines was used, and monthly reports at the time of conducting interviews which were submitted by ASHAs, were used to determine the activities performed. Based on the 10-point checklist functionality/performance was assessed on a 10-point score with each task having 1 point with no negative marking. Those ASHAs scoring 1-5 were grouped as unsatisfactory, 6-7 as satisfactory, and 8-10 as having good performance/functionality.

Data Analysis

Collected Data was compiled, tabulated, and presented using Microsoft Excel. The analysis was done using SPSS v.16, statistical tools like mean, median, range, and proportion were used, Chi-square test was used as a test of significance wherever required.

Ethical Consideration

Ethical approval was obtained from the institutional ethics committee. (letter no EC/13/2017 dated 11th MAY 2017). After which, the study was commenced.

RESULTS

It was observed that the majority of the ASHA belonged to the 36-40 years age group 25(33.3%) and were educated up to the secondary level of schooling 40(53.3%). Majority ASHA were Hindu by religion 66(88%) and 74(98.7%) were married. The majority were from lower-middle socio-economic class 36(48%). It is observed that the majority of ASHA were working for more than 6 years 54(72%), 11(14.67%) had work experience of 0-3 years while 10(13.3%) had that of 3-6 years. It was observed that 48(64%) ASHA workers had attended at least one meeting with ANM while the remaining had at least two meetings with the ANM per week. It was seen that 46(61.3%) ASHA workers had attended one meeting with AWW while 28(37.3%) had two meetings per week and 60(80%) had attended 9-12 meetings with ASHA facilitator per year while 12(16%) had at least 12-15 meetings.

Knowledge scores for each domain (ANC+PNC+ Other roles & responsibilities) were combined and total score was converted to, out of 10, the same criteria were applied for satisfactory & good categorization as for individual domains. It was observed that the Majority of the ASHA workers scored more than 8 points about ANC care 50(66.7%), 42(56%) scored a perfect 10 with regards to PNC care while 36(48%) scored 10 points with regard to roles and responsibilities of ASHA.

It was seen that there was a shortage of all the basic equipment like watches available with 45.33%(34), Thermometers with 49.33%(37), weighing balance at 93.33%(70), baby baskets with 68%(51), baby feeding spoon with 77.33%(58), kit bag with 81.33%(61) while there was no one with communication kit and mucous extractor and most of the drugs with the ASHA workers. Drugs available with the majority of the ASHA workers were Tab. Paracetamol 70(93.33%), Tab. Iron folic acid 74(98.67%), Tab. zinc 65 (86.67%), Oral contraceptive Pills 62(82.67%), and Oral rehydration solution sachets 67 (89.33%). Sanitary pads were available with only 14 ASHAs (18.67%). Spirit, povidone ointment, soap, sterilized cotton, and bandages were available with 13 (17.33%), 9 (12%), 6 (8%), 5 (6.67%), and 1(1.33%) ASHA respectively. Tablet Dicyclomine and Tablet Cotrimoxazole were available with 10 ASHAs (13.33%).

Table 1: Monetary incentives paid for activities to ASHA workers. (n = 75)

Monetary incentives paid for (activity)	N (%)
ANC	30(40%)
Institutional Delivery	75(100%)
Reporting 15-49 age Women Death	47(62.67%)
HBNC Visits	75(100%)
Completed Immunization by 1Yr Age	75(100%)
DOTS Provider	75(100%)
Travelling allowance & Dearness allowance for Training Program	73(97.33%)
Pulse Polio Program	66(88%)
Motivate Couples for TL/NSV	75(100%)
Social Marketing of Contraceptive	64(5.33%)
Social Marketing of Sanitary Napkins	19(5.33%)
Facilitation of VHNSC (village health sanitation and nutrition Committee) meeting	74(98.67%)
Ensuring Complete Treatment of Leprosy	68(90.67%)
Complete Radical Treatment of Falciparum/ Vivax Malaria	75(100%)

From Table 1, it can be observed that the majority of the ASHA workers received monetary grants for the specified activities. Incentives received were less for ANC registration 30(40%) followed by social marketing of sanitary napkins 19(25.33%). For assessing if incentives were given or not, oral response given for the pertaining question was considered. Details about payment were not explored.

Table 2: Functionality/performance of ASHA as per NRHM 10-point checklist (n = 75)

Functionality/performance	N (%)
New-born visit on Day 1	73(97.33%)
Home visits as per HBNC(home based new born care) Guidelines	75(100%)
Attend VHNDs(village health nutrition day) & Immunization sessions	75(100%)
Supporting Institutional Delivery	58(77.33%)
Management of Childhood Illnesses	68(90.67%)
Household visits with Nutritional Counselling	75(100%)
Fever cases seen & Malaria slides prepared	40(53.33%)
Being DOTS (Directly observed Treatment short course)Provider	46(61.33%)
Holding & Attending VHSNC (village health sanitation and nutrition Committee) meetings	59(78.67%)
Referral for Intra uterine device /tubal ligation/ Non scalpel Vasectomy &providing Oral contraceptive pills /Condoms	45(60%)

It was observed from that table 2. that the monitoring evaluation activities conducted by ASHA workers were 73(97.33%) did newborn visits on day one, 75(100%) did home visits as per HBNC guidelines and attended VHNDs & immunization sessions. Apart from fever cases seen and malaria slide preparation 40(53.33%) all other activities were done by the majority of the ASHA workers.

Table 3: Distribution of ASHAs according to the type of records maintained (N=75)

Register	N (%)
Health register	72(96%)
Birth & Death register	72(96%)
Public dialogue register	63(84%)
Referral register	58(77.3%)
Untied grant register	5(6.67%)
Stock card	45(60%)

Table 3 gives the details of the registers maintained by the ASHA, majority of the ASHA maintained health register 72(96%), Birth and Death register 72(96%), public dialogue register 63(84%), and referral register 58(77.33%) registers related to untied grant was maintained by only 5(6.7%) and stock card by 45(60%). It is observed that attending refresher training and attending >12 meetings per year with ASHA facilitators had a statistically significant positive effect on the performance of ASHA. Whereas work experience, Knowledge, and education had no significant effect. (Table 4)

Table 4: Factors Affecting performance of ASHA workers (n = 75)

Parameter	Performance		X ²	P-Value
	Satisfactory	Good		
Attended Refresher training				
Yes	2 (16.6%)	10 (83.4%)	4.224	0.026
No	34 (53.9%)	29 (46.1%)		
No. of Meetings with ASHA facilitator				
Up to 12/year	35 (57.4%)	26 (42.6%)	9.587	0.01
>12/year	1 (7.2%)	13 (92.8%)		
Work Experience				
Up to. 6 years	10 (47.6%)	11 (52.4%)	0.046	

>6 years	26 (48.2%)	28 (51.8%)		0.967
Knowledge				
Satisfactory	30 (44.8%)	37 (55.2%)	1.545	0.143
Good	6 (75%)	2 (25%)		
Education				
Up to 10th	24 (45.3%)	29 (54.7%)	0.228	0.612
> 10th	12 (54.6%)	10 (45.4%)		

DISCUSSION

The present study was conducted among 75 ASHAs working under 5 randomly selected PHCs (15 ASHAs per PHC) to assess the training and knowledge obtained by them, the functionality of post-training supportive mechanisms in place in terms of equipment & drugs and meetings with supervisors, activities performed by ASHAs, records maintained and difficulties faced in doing the same if any, monetary grants received as work-based incentives in return for the activities performed and services provided and to assess the current performance and functionality of ASHA based on activities performed. A total of 75 ASHAs participated in the study.

Meetings with supporting staff (ANM(Auxillary Nurse Mid wife),AWW(Anganwadi worker) & ASHA facilitator)

In the present study, it was found that most of the ASHAs reported regular meetings with support and supervisory staff i.e. 64% reported weekly & 36% twice weekly meetings with ANM, 61.3% reported weekly, and 37.3% reported twice weekly meetings with AWW. Frequent supervisory visits also lead to better retention rates and infrequent visits lead to higher attrition as observed by Gray et al. in their study. (Gray,1988) .Uttekar et al. in their study observed that the majority ASHA met regularly with AWW and ANM for review activities.(Uttekar,2007) The findings in the present study were similar to other studies, suggesting sufficient supervisory and supportive meetings by on-the-field support staff, while those expected to be carried out by higher-level supervisors were not regular.

Assessment of knowledge of ASHAs

Regarding ASHAs' knowledge of ANC, it was found that a total of 97% of ASHAs had more than satisfactory scores. Regarding ASHAs' knowledge of PNC, it was observed that all the study subjects had satisfactory or good knowledge regarding Postnatal care. Regarding ASHAs' knowledge about their other roles & responsibilities which included their role in conducting Village Health & Nutrition Day, Village Health & Nutrition Committee, home visits, and other community activities, it was seen that 96% of ASHAs possessed satisfactory knowledge regarding their roles & responsibilities apart from MCH services. The findings in the

study were similar to those observed by (Karol, 2015) (Uttekar ,2007) and (Waskel ,2014) suggesting that ASHA workers possess good knowledge about their work and responsibilities. (Uttekar,2007)(Kawakatsu, ,2015)(Karol,2014)

Post-training support mechanism

The support mechanism for ASHAs was studied under four headings i.e. supportive supervision (already discussed earlier), provision of regular supplies comprising of equipment & drugs, work-based monetary incentives, and tools for record keeping. In the present study, it was found that there was a scarcity of basic equipment including thermometers, watches, mucus extractors, and communication kits which were to be regularly supplied to ASHAs according to the guidelines. Organizational support in the form of regular supplies & equipment was an important determinant of the productivity of the health workers and thereby the confidence of the community in the services provided. (Ahmed, 2008) (Jaskiewicz,2012).

Waskel et al. found that only 62.14% of ASHAs had received drug kits immediately after training. (Waskel, 2014)

Among the fourteen activities assessed for which the ASHAs were entitled to receive monetary benefits, only six activities were such where all the participants received the money. For others the proportion varied from 25.3% to 98.8%, Incentives for services like reporting deaths in women belonging to reproductive age groups, providing antenatal care, and social marketing of sanitary napkins were received by a lesser number of ASHAs. Incentives play an important role in the motivation and performance of CHWs since their delay directly causes inconvenience for household responsibilities and indirectly sends a message of disregard for the time and efforts invested by them.(WHO,2014) Uttekar et al. in their study observed that only 40% ASHAs received some cash remuneration while the majority didn't. Also, the time of payment varied from immediately to over a month. Guha et al also observed a similar tendency where ASHAs role as a 'health educator' took a backseat due to lower incentives, a finding which was observed by Waskel et al too. The findings in the present study are similar to those across India, where irregularities & delays in performance-based incentives have been reported. The detrimental impact of these irregularities on the motivation of health workers may lead to a change in their priority of assigned work and also diversion towards malpractices, thus affecting the program as a whole.

Limitation of the study: The monetary incentives which was given to ASHAs for specific activities here only the receipt of the payment was asked whether the payment was partial or complete was not asked. The quality of supervision done for ASHAs was not assessed in this study. Completion of the records maintained by ASHA was not assessed in the study.

CONCLUSION

The frequency of meetings with ASHA facilitators was inconsistent with NRHM guidelines. ASHAs demonstrated adequate knowledge of their roles, responsibilities, and ANC and PNC care, with most scoring in the satisfactory to good range during assessments. However, a majority of ASHAs had not attended refresher training sessions. Drug shortages in ASHA kits and a lack of essential equipment remain ongoing challenges. Additionally, work-based monetary incentives were not reimbursed regularly. ASHA participation was higher in some activities than others, largely due to variations in incentive levels

Recommendations:

Based on the findings and conclusions drawn from the study the following recommendations are suggested:

Skill-based refresher training is to be conducted at regular intervals as per NRHM guidelines.

A dedicated team comprising of selected block-level ASHA facilitators, ANM, and Medical Officers should be formed at each district for monitoring the attendance of ASHAs and ASHA-Trainers in refresher training sessions and notify respective PHCs accordingly. Meetings between ASHA facilitators and ASHA to be regularised and records to be maintained.

The Equipment kits provided to ASHAs should be assessed and the deficiencies should be resolved by means of regular supplies which should be closely monitored by a dedicated Zonal team comprising of selected State-level Health Officials. Strict guidelines should be formed for inventory management in PHC regarding the distribution of drugs among ASHAs and the proportion of drugs to be utilized for the provision of curative services at the PHC. A fixed basic amount in the form of a stipend along with work-based incentives may be provided, to empower the ASHAs to meet their household expenditures and increase their motivation.

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Conflicts of Interest

The authors declare no conflicts of interest.

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