

# Barriers Encountered by Accredited Social Health Activists (ASHA) in Arthritis Rehabilitation: A Qualitative Study

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## ABSTRACT

**Introduction:** Healthy behaviour through education of individuals with arthritis is the mainstay of long term management. Time and access constraints restrict medical professionals from active involvement in arthritis education in the community. Reaching the community through the Accredited Social Health Activists (ASHAs) is the plan of action operational in India. Hence, the factors encountered by ASHAs while delivering arthritis education programs need to be studied.

**Aim:** The aim of the study was to explore the experiences of ASHAs while delivering arthritis education program.

**Materials and Methods:** Qualitative exploratory design employing semi-structured interviews was adapted for the study. The interviews were conducted using focus groups of ASHAs

from two geographically similar villages. Inductive analysis of focus group discussions was undertaken to determine themes, categories and codes.

**Results:** Three broad themes were identified from the interviews which influenced the performance of ASHAs. Categories identified show the influence of training, characteristics of ASHAs, geographical features, family characteristics and community attitude. Few problems reported were means of transport, time constraints, multiple tasks, type of incentive and frequency of on-field demonstrations.

**Conclusion:** Providing motivation for altruistic services has always been a challenge to governing bodies. The issues identified in this study can be addressed prior to integrating ASHAs for rehabilitation services.

**Keywords:** Exercises, Focus group discussions, Older adults, Patient education

## INTRODUCTION

Musculoskeletal Disorders (MSDs) among older adults is a major disabling condition and arthritis accounts to the most prevalent MSDs among Indian elderly as cited by Indian Council of Medical Research in 2012 [1]. Song J et al., have reported that arthritis results in difficulties in functional and psychological domains, thereby reducing the quality of life of the individual [2]. World Health Survey, India in 2003, states that the arthritis prevalence rate in Karnataka is about 26.6%, whereas not all individuals seek treatment [3].

Knowledge about the disease helps to promote positive behavior towards the disease, as it empowers the patients to be responsible for their own health [4]. Health professionals are equipped with knowledge about the condition, which should be delivered to the patient. Educating patient with arthritis can have a significant effect on health status like knowledge about the disease; causes, progression, disability, depression, and joints affected [5,6]. Gopalan S et al., illustrated that because of time constraints and issues related to accessibility, medical professionals in India are not able to provide education to patients with arthritis in the community [7].

According to Joshi SR et al., reaching the community through the ASHAs is the leading plan of action presently operational in India [8]. Conducting health programs through community health workers like ASHAs may become a major means of reaching the community for arthritis rehabilitation. But their role may be limited due to various barriers. Hence, it is important to explore the potential barriers prior to extensive recruitment of ASHAs for arthritis education program. This study was undertaken to explore the experience and barriers faced by ASHAs while delivering arthritis education program.

## MATERIALS AND METHODS

This study used a qualitative exploratory design for understanding the implementation of arthritis education program conducted in two geographically similar villages; Hiriyaadka and Athradi, Karnataka, India. All the ASHAs who worked at Hiriyaadka (n=6) and Athradi (n=2) Primary Health Centers were recruited for the study. The study

was conducted during March, 2013 to May, 2013. ASHAs involved in the Primary Health Centers of these two villages were recruited and they underwent a two week training program. The training was carried out by the principal investigator while pursuing her postgraduation in community physiotherapy. The training module contained screening and evaluation of individuals with arthritis along with education, regular reinforcements, and re-evaluation to determine the effectiveness of the education. The training was kept simple, with clearly defined objectives. It also included on-field practice. The training module was formulated as per the protocol suggested by O'Brien MJ et al., in 2009 [9].

The education program used handouts with pictorial representations and descriptions about the pathology of arthritis, pain relief techniques, joint protection and energy conservation, active exercises, nutrition and general physical fitness which were adapted from the reviews done by Riemsma RP et al., and Johnson A [6,10].

Performance based incentives were provided to ASHAs as per guidelines by World Health Organization in 2008 [11]. The incentives were both monetary and non-monetary. A sum of thirty five rupees was provided for each individual recruited by ASHAs. The non-monetary benefit was free treatment at the Department of Physiotherapy of the source hospital. ASHAs were regularly telephonically encouraged for follow ups. The ASHAs were given a period of three months to recruit individuals with arthritis and implement the arthritis education program. This study was conducted subsequent to implementation of the program. The sampling technique adopted was purposive sampling for homogenous recruitment of ASHAs. Focused Group Discussions (FGDs) were conducted for each of the homogeneous group of ASHAs.

Homogeneity was ensured by categorizing ASHAs based on their performance (i.e., number of patients recruited) which formed high, average and low performance groups. Three FGDs were conducted, each one by a moderator along with an observer and a scribe [Table/Fig-1]. Number of ASHAs in each category of FGDs

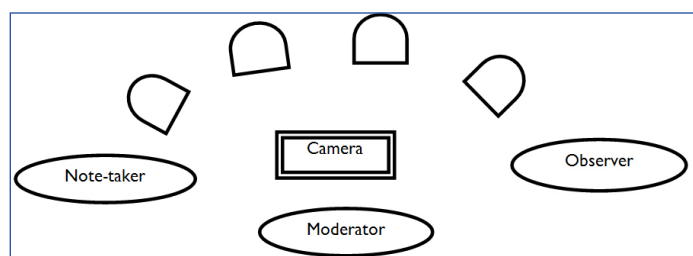
were two in high performance group, three each for average and low performance group. The moderator carried out the discussion, the observer monitored equal participation by ASHAs and the note-taker took notes of expressions and involvements. Each interview lasted for 45-60 mins and it was audio recorded.

FGDs were based on a pre-developed conceptual framework as shown in [Table/Fig-2]. This framework aimed at addressing the issues of ASHAs while carrying out the arthritis education program. The framework was used to develop open-ended questions and probes to direct the interviews. [Table/Fig-3] gives a detailed description of the open-ended questions and probes used to conduct the interview. The data of the FGDs were transcribed in Kannada by a native speaker and back to English. The transcribed data was thematically analyzed.

Approval to conduct the study was obtained from Institutional Research Committee, SOAHS and ethical clearance from Institutional Ethics Committee, Kasturba Hospital prior to the commencement of the study. Written informed consent was obtained from ASHAs for audio recording of the interviews.

### STATISTICAL ANALYSIS

Data analysis was done using SPSS version 15.0. Descriptive statistics was used to describe the characteristics of ASHAs.



[Table/Fig-1]: Seating arrangement for the FGDs.

	Components	Probes
1.	Problems	Reaching the community, delivering the services, monetary concerns, time constraints, contribution towards your family
2.	Exercises	Handouts, comprehend
3.	Attitude	Towards exercise performance, towards ASHAs
4.	ASHAs	Clarity, comprehend, explanation methods, time spent, importance of exercise, reinforcements, follow up
5.	Adherence	Adhering to the program, Problems to adherence, time taken, comprehend, family cooperation

[Table/Fig-2]: The conceptual framework adapted for formulation of interviews.

	Open-ended questions	Probes
1.	What are your experiences while educating the community?	What were the problems encountered in the community? How did you manage the problems? Would you suggest solutions for future implementation? What are the problems encountered during service delivery?
2.	What are the trainings you underwent?	What forms of exercise, how did you teach, what was the role of handouts, how was the response to handouts and exercises?
3.	What was the attitude of the individuals with arthritis towards your services?	What was the acceptance level, what might be the reason for this response? What was the attitude towards exercises? What was your response for this?
4.	Can you elaborate on your training?	Was there clarity in the training? Did you comprehend your role? What were the explanation methods? How long did you spend for time spent for each individual? How did you reinforce during follow ups?
5.	Can you describe your experiences during follow ups?	Were there any problems to adherence? What were the components reviewed? How long did you spend for follow ups? What was the response from families?

[Table/Fig-3]: The interviews schedule with open-ended questions and probes for FGDs.

Inductive coding was carried out by three researchers independently using Microsoft Word 2007. Finally data from interviews was summarized into codes, categories and themes.

### RESULTS

Eight ASHAs participated in three FGDs conducted by the investigators. There was no substantial difference in the years of experience in field work among the ASHAs. There was one class difference on Kuppuswamy's socioeconomic scale between ASHAs from both the villages [Table/Fig-4].

The data of the FGDs were transcribed in Kannada and back to English. The transcribed data was thematically analyzed. Data analysis revealed codes which were categorized into themes. The themes were analyzed to determine emergent themes, regarding the experiences of ASHAs while conducting the field work and factors influencing their performance of recruiting individuals with arthritis. [Table/Fig-5] shows a summary of the results obtained from data analysis of the FGDs.

Variables	Village-1 (n=6)		Village-2 (n=2)	
	Mode	Mean (±SD)	Mode	Mean (±SD)
Age (in years)	-	40.16±3.8	-	32.5±3.5
Experience as ASHA (in years)	-	4.66±.81	-	4.00±.00
Socioeconomic status (Kuppuswamy's SES)	III (Lower-middle class)	-	IV (upper lower class)	-
No. of FGDs conducted	2		1	
FGDs classification*	Average performance-1 Low performance-1		High performance-1	
Qualification (Government training)	Training for maternal and child health Training for prevention and control of communicable diseases, sanitation and hygiene			

[Table/Fig-4]: Demographics and other characteristics of ASHAs (n=8). \*The classification for FGDs was based on the performance of the ASHAs. Performance was evaluated based on the number of individuals with arthritis recruited and the number of follow ups completed. High performance was ≥ 10, average=5-9 and low was < 5 recruitment

THEMES			
	ASHA-related	Community-related	Training-related
<b>CATEGORIES</b>	<b>CODES</b>		
Accessibility	Means of transport Environmental barriers	Remote areas Scanty population	-
Unavailability	Time Workload	Working hours	-
Comprehension	Quality of training	Pictures and letters Clarity in handouts	-
Performance	Knowledge Presence of instructor Incentives from alternate jobs	Adherence to exercise Pain while exercise Educational level of community	Adequacy of on-field demonstrations
Attitude	-	Towards ASHAs Towards medical care Towards exercise	-
Economy	Salary for field work	-	-
Study*	Long duration per session	-	Stringent inclusion Short study duration
Family	Adequacy of support	-	-

[Table/Fig-5]: Themes, categories and codes derived from the FGDs with ASHAs. \*Prior to conducting FGDs, ASHAs were involved in the arthritis education program study (unpublished) which involved training to recruit, educate, treat and follow up of community dwellers with arthritis

### Emergent Themes

Three broad emergent themes were revealed after analysis of transcribed data. The themes were:

- i) ASHA related factors;
- ii) community related factors and;
- iii) training related factors influencing the performance of ASHAs.

The [Table/Fig-6] shows the comments by ASHAs during FGDs which have been categorized under the emergent themes.

Categorizes	ASHA related factors influencing performance
Accessibility	"...due to of fear of dogs, dense forest and lonely roads it becomes difficult to travel alone far and wide." "... we do lot of work, the government can arrange a bicycle for us. It will be easy faster and cheaper..."
Unavailability	"...they are usually unavailable because whenever we go for field visits they would have already left for work."
Performance	"...our work is just to tie beedi. The centre gives bonus and scholarship for children and health cards too. But we don't get any such incentives for the field work. So our family members get angry"
Categorizes	Community related factors influencing performance
Attitude	"Because we got only 21 days training so less educated people think...we might be lying to them." "The only thing was whenever we visited they asked us that, is there any medication for this problem or do we need to visit hospital"
Categorizes	Training related factors influencing performance
Performance	"...if you come and talk to them and tell them that you have allotted us for this work, then they might get some trust on us."

**[Table/Fig-6]:** Qualitative comments from focus group discussions under the emergent themes.

**i) ASHA-related factors influencing performance:** Each ASHA has been assigned to 1000 population in an area as per the National Rural Health Mission, 2005 guidelines [12,13]. All the ASHAs had difficulty to overcome remote and scattered households and environmental barriers like forests, dogs and lonely roads. Walking being the only mode of transportation for service delivery, ASHAs considered it a reason for low performance. Few ASHAs have suggested that provision of a bicycle by the government may improve their efficiency.

The villages where this study was conducted have a low population density and the houses are situated in various terrains; like hills and forests. Though there are roads but, lack of means of transport reduced the accessibility to village dwellers.

ASHAs informed that they did not have any problem in combining the work assigned by the government along with the arthritis program. Moreover, this helped them to save time and reduce extra burden. If they would have done on separate days, the burden of alternate job and household work would have reduced their efficiency.

Five out of the eight ASHAs had alternative jobs. Managing time for field work, household chores and alternative earning methods might have reduced the efficiency. All five ASHAs with alternative jobs informed that they like the field work as they gained knowledge and respect in their community. But they preferred spending time on the alternative jobs since it provided better income. One of the ASHAs involved in beedi packaging industry reported that the company provided good salary and other incentives like scholarships for her child, health cards, and also she could work from home.

Monetary and safety concerns were the major contributors to reduced family support for ASHAs. ASHAs spend three days per week for community activities but earn marginal incentives.

#### **ii) Community- related factors influencing performance:**

The ASHAs spent three days per week for this study along with regular field work. They started in the morning and continued till late evening, for data collection and interventions. In the villages, most of the community dwelling individuals with arthritis were employed and were involved in housekeeping at households, temples, hostels and hospitals. These individuals had to leave for work early and return late and therefore were frequently unavailable during the arrival of ASHAs at their home. This posed a great problem for recruitment as well as follow up.

The ASHAs were trained to reinforce regular exercise and joint protection techniques to the subjects once in every two weeks. Few individuals had reported to ASHAs that lack of adherence to exercise was due to unavailability of time after household chores or after return from work.

Education and attitude towards exercise play a major role in incorporating exercise in daily routine. One of the ASHA reported that individuals, who were educated like teachers, understood the necessity of exercise for joint pain and arthritis and therefore agreed to participate in the study and also showed good adherence to the exercise program.

ASHAs told they had screened seventy three individuals but, only forty eight gave consent for participation. Though ASHAs were selected from their community they reported that community dwellers lacked trust in them. Community dwellers suspected the knowledge acquired through training by ASHAs. Hence, the ASHAs requested the instructors to accompany them and spread awareness about their acceptance as health care providers.

The desire to take medication and topical applications like oil, pain reliving ointments were the principal requests put forth by the individuals with arthritis. ASHAs were unable to change this attitude of the individuals towards medication, and also they were unable to educate regarding the adverse effects of long-term intake of medications. Hence, this could have affected the trust on ASHAs.

#### **Training-related factors influencing performance**

ASHAs stated that the training was appropriate and understandable and they were able to incorporate on-field recruitments and intervention. But, community dwellers had queries like what are the harms of taking medications and how exercise is effective compared to medications. These aspects were not included in the training module. Inability to answer the queries might have weakened the trust of individuals recruited by ASHAs.

On field demonstrations were included in the module but only at the initiation of the program. Additional on-field demonstrations and methods of creating awareness in the community about their skills through camps, or recognition ceremony might augment the performance of ASHAs. Similarly in this study, ASHAs stated in order to improve their confidence they needed more on-field demonstrations at frequent intervals. Hence, this might have posed a barrier to better performance of ASHAs.

Financial and non-financial incentives were provided to ASHAs during the study. But the financial incentive provided was performance based hence. ASHAs received only when they recruited individuals with arthritis.

#### **Motivating factors**

Encouraging factors reported by ASHAs were, service satisfaction and additional knowledge about arthritis. Training related factors that facilitated ASHAs for this activity were the provision of pictorial handouts, incentives and regular telephonic encouragements. A simple and easy to enforce education module was planned and implemented. The program module was planned to address the issue of multitasking by ASHAs by keeping it simple and easy.

## **DISCUSSION**

The ASHAs in this study were trained and experienced field workers with an average age above 35 years, belonging to lower socioeconomic status. Previous studies have reported a significant influence of sociodemographic and socioeconomic variables on the performance of community health workers like ASHAs [14].

Studies have reported that the time of transportation and geographical terrain as a problem faced by the ASHAs making them unable to complete the coverage of designated households [15-17]. The villages where this study was conducted have a low population density and the houses are situated in various terrains; like hilly areas and forests. Though there are roads built but, a lack of means of transport reduced the accessibility to village dwellers. Governmental intervention through the provision of bicycles was also reported.

Influence of multiple tasks, time and family were reported by ASHAs. Factors like multitasking including household chores and alternate jobs in limited time can negatively influence the performance of

community health workers [14,18]. Kok MC et al., reviewed studies that showed both positive and negative influences of family on community activities. The burden of household duties was found to negatively impact performance [14].

Community response to exercises and towards ASHAs was also reported. Mailey EL et al., found working beyond house activities posed as a barrier to exercise and physical activities [19]. Studies by Kok MC et al., Mpembeni RN et al., and Mishra A, have advocated the need for the trust and respect of community dwellers on ASHAs for their better performance [14,20,21].

ASHAs are altruistic lay health workers hence their desire to provide services is influenced by training and the return gained from services. Lopes S et al., found that training helped to improve the performance of community health workers but the effects of training reduced within three months [22]. Saprii L et al., and Mpembeni R et al., reported the need for regular and adequate incentives for better performance and any deviation may affect the altruism of ASHAs [17,20].

This study also identified factors motivating ASHAs like respect from the community, service satisfaction, and additional knowledge about a widespread and common disability like arthritis. Bajpai N et al., and Saprii L et al., have also reported similar motivating factors by ASHAs for service provision [12,17].

A major problem in conducting community programs is large attrition of community personnel involved in health care delivery [15]. While carrying out this study, none of the ASHAs dropped out. Issues like alternate jobs, low monetary benefits, increased workload, and poor acceptance in the community were reported but none of the ASHAs withdrew participation from the study. This is contrary to studies by Bhattacharyya K et al., and Alam et al., who have reported attrition of community health workers [15,23]. But this can be accounted for the less number of ASHAs in this study, direct supervision, and regular telephonic follow up. Financial and non-financial incentives were other added advantages.

The strengths of this study are that the identified barriers can be addressed prior to large-scale integration of rehabilitation programs with other rural health programs. Rehabilitation professionals can implement programs by integrating ASHAs. The involvement of ASHAs in a program will help to empower the community, reduce health care expenditure in long run and help to reach a large scale population [13,24]. Also, this study was carried out based on Community Based Rehabilitation (CBR) guidelines by WHO in 2010 [25]. Hence, it involves capacity building of the people with arthritis and mobilization of community resources through training of ASHAs.

## LIMITATION

Limitation of this study is that the performances of ASHAs may differ based on region, demographic characteristics like their age, household responsibilities and socio-economic status which were not explored in this study. Moreover, each FGD must be conducted on 6-12 participants. Due to less ASHAs recruited, this criteria could not be met.

## CONCLUSION

The FGDs revealed that ASHAs encountered certain difficulties towards recruiting a large number of community dwellers with

arthritis like lack of regular incentives; focus on the alternate job, environmental barriers and attitude of the community towards ASHAs. The experiences of the ASHAs will in turn help us determine areas to be addressed by rehabilitation professionals when empowering the community health workers.

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