

Original Research Article

A community-based knowledge, attitude and practices study of Accredited Social Health Activist functionaries in active case detection of Leprosy in Sitapur district of Uttar Pradesh

Jaideep K. Chaubey¹, Arslan Neyaz^{1*}, Malik S. Ahmed²,
Virendra Kumar¹, Kripashankar Nayak¹

¹Department of Community Medicine, Hind Institute of Medical Sciences, Sitapur, Uttar Pradesh, India

²Department of Community Medicine, MSD Autonomous State Medical College, Bahraich, Uttar Pradesh, India

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*Correspondence:

Dr. Arslan Neyaz,

E-mail: arslanneyaz2002@yahoo.com

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ABSTRACT

Background: Leprosy was eliminated at the global level in the year 2000. But regional disparities still exist. Some countries have not attained the elimination status and still reporting a good number of cases. The major burden of new cases was from India, Brazil and Indonesia. Early case detection and treatment is the key to achieve elimination. ASHA workers are involved in this campaign to make it successful. The objective of this study was to assess the knowledge of ASHA functionaries regarding leprosy disease and to analyze the field practices of ASHA functionaries during LCDC activity.

Methods: The present study was a community based observational study which was conducted at field practice area of RHTC, Hind Institute of Medical Sciences from 6 November to 19 November 2017. All ASHA functionaries were interviewed using preformed semi-structured questionnaire. Data were stored in Microsoft excel XP and analyzed.

Results: None (0%) of ASHA functionaries correctly knew the exact cause of leprosy. Only 10.2% knew mode of transmission, 89.8% knew sign and symptoms, 28.6% knew complications, 12.2% knew prevention of complications, only 10.2% knew exact meaning of MDT. Only 63.3% ASHAs had prior information about orientation training. Out of these only 26.5% completed the practical exercises. Local community remained uninformed about LCDC activity as IEC activities were very poor in all of the centers.

Conclusions: In India ASHA workers are the main health functionaries for LCDC activity and in this study, we found that quality of orientation training was substandard as compared to GOI guidelines. So, every effort should be given to make orientation training successful.

Keywords: ASHA, Hensen's disease, Leprosy, LCDC

INTRODUCTION

Leprosy or Hansen's disease (HD) is a well-known disease since the days of Sushruta and Charakas. In India, this disease is still known as 'Kusht' meaning 'eating away'. It mainly affects the skin and peripheral nerves but it can also affect the other sites. It is one of the important causes of permanent physical disability. The impact of disability on

the life of the affected person, family and as a whole in the society, is tremendous.¹ In 1991, WHO passed the resolution of 'Elimination of leprosy' by the year 2000 and accordingly outlined the strategies. Criteria for elimination of leprosy as a public health problem is prevalence <1 case per 10,000 population. Leprosy was eliminated at the global level in the year 2000.¹ But, regional disparities still exist. Some countries have not attained the elimination status and still reporting a good number of cases. WHO has

identified 22 'Global Priority Countries', having a higher burden of leprosy and together contributed more than 90% of cases in the last 10 years. The major burden of new cases was from India, Brazil and Indonesia during 2016.

According to recent statistics, a small reduction (3.4%) was reported during 2017 in comparison to 2016. This global reduction of new cases was mainly due to the reduction of cases reported from India.² Leprosy is widely prevalent in India. Although the disease is present throughout the country, the distribution is uneven. After introduction of Multi Drug Therapy (MDT) in the country, the recorded leprosy case load has come down from 57.6 cases per 10,000 populations in 1981 to less than one case per 10,000 populations at national level in December 2005, and the country achieved the goal of leprosy elimination at national level following intensification of case detection and treatment activity under the National Leprosy Eradication Programme.³ A total of 85,302 cases were on record as on 1st April 2019, giving a prevalence rate of 0.67/10,000 populations.³ New cases were reported mainly from Uttar Pradesh, Bihar, Maharashtra, Chhattisgarh and Odisha.¹

Now, the WHO Global Leprosy Strategy 2021-2030: 'Towards zero leprosy' was developed through a broad consultative process with all major stakeholders during 2019-2020. The strategy aims to contribute to achieving the Sustainable development goals.⁴ Whereas previous strategies focused on the 'elimination of leprosy as a public health problem', defined as less than one case on treatment per 10,000 population, the new strategy focuses on interrupting transmission and achieving zero autochthonous cases. In doing so, the Strategy aims to motivate high-burden countries to accelerate activities while compelling low-burden countries to complete the unfinished task of making leprosy history.⁴

Early case detection and treatment is the key to achieve elimination as detection of leprosy cases early in the community will lead to depletion of source of infection and hence interrupt transmission of disease in the community. Leprosy Case Detection Campaign (LCDC) is first of its kind initiative taken by Govt. of India to detect cases of leprosy early in the community in endemic districts. Accredited Social Health Activist (ASHA) workers are involved in this campaign to make it successful. As ASHA workers generally belong to the village in which she is working it helps the patients to overcome stigma attached with the disease and approach these workers on reporting any symptoms of disease. ASHA LCDC campaign is primarily a door-to-door search activity with physical examination and identification of suspects followed by confirmation of diagnosis with provision of free of cost treatment from Government health centers. The objective of this study was to assess the knowledge of ASHA functionaries regarding leprosy disease and to analyze the field practices of ASHA functionaries during LCDC activity.

METHODS

The present study is a community based observational study which was conducted at Field practice area of Rural Health Training Centre (RHTC), Hind Institute of Medical Sciences, Sitapur from 6 November to 19 November 2017. In this study total 49 ASHA functionaries were involved from six sub-centers attached with RHTC, Ataria under Department of Community Medicine as shown in table 1. All ASHA workers who were present in meetings and willing to be a part of study were included. All 49 ASHA workers agreed to be part of this study. Ethical clearance was taken from Institutional ethics committee of Hind Institute of Medical Sciences, Sitapur. All ASHA functionaries were interviewed using preformed semi-structured questionnaire and observed by faculty of department of community medicine during LCDC activity. Both open ended and close ended questions were asked. Data were stored in Microsoft excel XP and analyzed.

About LCDC

Leprosy Case Detection Campaign is implemented by Central Leprosy Division (CLD). The objectives of this campaign are (i) to identify the hidden leprosy cases in the community so as to curtail the spread of disease at community level and (ii) to improve case detection with the help of ASHA. This campaign is based on house to house search of leprosy disease suspects by search team comprises of two members; one of which is ASHA functionary and other one is male volunteer through physical examination of house hold members at their houses. Suspects are referred to Government Hospital where Medical Officer investigates them and those with disease get full treatment free of cost.

For its implementation workshops, meetings and trainings are conducted at different levels. At state level training; trainers would be SLOs (State Leprosy Officers), SLCs (State Leprosy Consultants), Central Nominee and ILEP/WHO Representative; trainees would be DLOs (District Leprosy Officers), DLCs (District Leprosy Consultants) and Block/Municipal Medical Officers. The objective of the state level training is to sensitize the district and block level planners on the strategy to be followed, need for preparing microplans for their areas. Other activities are involving the district and block officers in preparation of micro-planning, financial, human resource and IEC strategy. The district level meeting is chaired by the Chief Medical Officers (CMO)/DLO/DLCs and the NLEP consultants from ILEP and officers from General Health Care Staff and representatives from coordinating departments are involved in these meetings. Special instructions are given to strengthen IEC activity before and during the LCDC activity to yield good results. The in-charge medical officers then conduct orientation training for ASHAs along with primary health centre staff to ensure optimum participation in the activity. During this training, micro-planning of activity is to be done so as to

ensure that at least 20 houses to be covered by the team in one day.

Tally sheets are demonstrated to ASHA workers along with house markings. Various exercises are conducted to improve operational skills such as recognition of signs and symptoms of leprosy. Role Plays, etc. are conducted to improve Inter-personal Communication. Frequently asked questions (FAQs) form an essential component of all ASHAs training sessions. The team for door-to-door survey consisted of one ASHA and one field level worker (preferably male) which ensure maximum participation of community during house-to-house search activity and during physical examination of household member. During house to house search activity the team member asks about signs and symptoms and conduct physical examination of family member, followed by recording in tally sheet and house marking. If all members are available for examination that house will marked-as L/Date and if some family member are not available or house was locked, this house will be marked as X/date. The team members will revisit 'X' house and do examination of remaining family members, convert that house to 'L' house. The Health workers from primary Health Center are first level supervisors. The district levels officers are the part of second level monitoring.^{5,6}

RESULTS

Faculty of department of community medicine supervised the ASHA functionaries during LCDC activity in field and also interviewed them. Majority of ASHA workers were of the age group between 25 to 35 years of age. 51% were having secondary level of education and 89.8% were Hindu by religion. Almost all were married at 95.9% with 40.8% belonging to scheduled castes (Table 2).

When ASHA functionaries were asked regarding Leprosy disease, it was found that none (0%) of ASHA functionaries correctly knew the exact cause of leprosy. Only 10.2% knew mode of transmission, 89.8% knew sign and symptoms, 28.6% knew complications, 12.2% knew regarding prevention of complications and only 10.2% knew exact meaning of MDT, although 100% ASHA functionaries knew treatment and investigation facility available free of cost in Govt. health centers. 90% ASHA were aware regarding their responsibility about leprosy case search and treatment in community. Almost all were aware that they would be getting performance-based incentive but only 37% ASHA functionaries knew that for detection, treatment completion of paucibacillary and multibacillary case they would get Rs. 250, Rs. 400 and Rs. 600 respectively as per GOI guidelines (Table 3). When ASHA functionaries were asked regarding orientation training for LCDC campaign only 63.3% ASHAs had prior information about orientation training and all of them attended the orientation training. Out of these only 26.5% completed the practical exercises but none of ASHA functionaries got IEC material. Surprisingly 36.7% of ASHA functionaries even did not have prior information of date, time and venue of orientation training before LCDC activity (Table 4). We observed that local community remained uninformed about LCDC activity as IEC activities were very poor in all of the centers. None of the ASHA workers were carrying a microplan or a map with itinerary. Only 51% ASHA functionaries were correctly marking the houses and 75.5% ASHA functionaries were completing their daily target of house-to-house search. Almost all ASHA functionaries were correctly asking the symptoms of leprosy disease and correctly conducting the physical examination and referring the suspects to Govt. health centre for further investigation and treatment (Table 5).

Table 1: Sub-centre wise population coverage and number of ASHA.

Sub-centre	No. of ASHA	Population coverage
Ataria	10	11,276
Khartohana	4	6,740
Nayogaon	6	8886
Kuwarpur	9	10326
Sarora	8	9281
Parewajal	12	16,585

Table 2: Socio-demographic profile of ASHA workers (N=49).

Socio-demographic characteristics	N	Percentage (%)	
Age (in years)	<25	6	12.3
	25-35	20	40.8
	35-45	15	30.6
	> 45	8	16.3
Education	Middle	14	28.6
	Secondary	25	51.0
	Senior secondary and above	10	20.4
Religion	Hindu	44	89.8
	Muslim	5	10.2

Continued.

Socio-demographic characteristics		N	Percentage (%)
Marital status	Unmarried	2	4.1
	Married	47	95.9
Population served	<1000	20	40.8
	1000-2000	24	49.0
	>2000	5	10.2
Caste	SC	20	40.8
	ST	0	0.0
	OBC	16	32.7
	General	13	26.5

Table 3: ASHA's knowledge regarding Leprosy disease and its management.

Knowledge components	No. of ASHAs who gave correct response N (%)	No. of ASHAs who gave incorrect response N (%)	Total N (%)
Cause	00 (0)	49 (100)	49 (100)
Transmission	05 (10.2)	44 (89.8)	49 (100)
Signs and symptoms	44 (89.8)	05 (10.2)	49 (100)
Complications	14 (28.6)	35 (71.4)	49 (100)
Prevention of complications	06 (12.2)	43(87.8)	49 (100)
MDT	05 (10.2)	44 (89.8)	49 (100)
Free treatment and investigation facility in Govt. Health centers	49 (100)	00 (0)	49 (100)
ASHA role regarding leprosy case search and treatment	44 (89.8)	05 (10.2)	49 (100)
Incentives regarding leprosy case detection and treatment	20 (37)	29 (63)	49 (100)

Table 4: Orientation training of ASHA functionaries for LCDC activity.

Training components	Response given by ASHA	
	Yes N (%)	No N (%)
Prior information of day, time, venue regarding training	31 (63.3)	18 (36.7)
Training attended	31 (63.3)	18 (36.7)
Practical exercises conducted at the end of training	13 (26.5)	36 (73.5)
IEC material received for distribution in field	00 (0)	49 (100)

Table 5: Role of ASHA functionaries in conducting LCDC activity.

Field activity during LCDC	Observations made by observer		
	No. of ASHA (yes) N (%)	No. of ASHA (not done/partial/incomplete) N (%)	Total N (%)
No. of ASHA functionaries carrying micro-plan	00 (0)	49 (100)	49 (100)
ASHA informed the community before starting this activity	00 (0)	49 (100)	49 (100)
ASHA distributed the IEC material in community before starting this activity	00 (0)	49 (100)	49 (100)
ASHA working in field from the onset of LCDC i.e.; 06/11/2017	08 (16.3)	41 (83.7)	49 (100)
ASHA started working in field after supportive supervision	49 (100)	00 (00)	49 (100)
ASHA having a map and itinerary for the area	00 (0)	49 (100)	49 (100)
ASHA having tally sheets and chalks in sufficient quantity	24 (49)	25 (51)	49 (100)
ASHA correctly filled tally sheets	25 (51)	24 (49)	49 (100)
ASHA correctly marked the houses 'L' and 'X'	25 (51)	24 (49)	49 (100)

Continued.

Field activity during LCDC	Observations made by observer		
	No. of ASHA (yes) N (%)	No. of ASHA (not done/partial/incomplete) N (%)	Total N (%)
ASHA completed the target for house to house search	37 (75.5)	12 (24.5)	49 (100)
ASHA correctly asked the symptoms of leprosy to family members	49 (100)	00 (0)	49 (100)
ASHA and other team members correctly examined the villagers	49 (100)	00 (0)	49 (100)
ASHA referred the suspects to Govt. health facility correctly	49 (100)	00 (0)	49 (100)

DISCUSSION

ASHA functionaries were interviewed regarding leprosy disease; it was found that none of ASHA functionaries correctly knew the exact cause of leprosy. It was observed that very few knew mode of transmission, regarding prevention of complications and exact meaning of MDT but majority of the ASHA knew sign and symptoms of leprosy. More than 1/4th ASHA's knew about complications whereas 100% ASHA functionaries knew treatment and investigation facility available free of cost in Govt. health centers. Majority of the ASHA were aware regarding their responsibility about leprosy case search and treatment in community. Almost all were aware that they would be getting performance-based incentive but less than half of ASHA functionaries exactly knew that for detection and treatment of leprosy cases they would get incentive as per GOI guidelines. Gosavi et al in his Wardha study and Garg et al also found that most of ASHA workers did not know exact amount of incentive although they understood their responsibility to refer the leprosy patient to PHC.^{7,8}

When ASHA functionaries were asked regarding orientation training, just more than half of the ASHA's had prior information about orientation training and all of them attended the orientation training. Out of these, only 1/4th completed the practical exercises but none of ASHA functionaries got IEC material. So, quality of orientation training was not meeting to desire standard level as compared to GOI guidelines. Bhagat et al and Sekar et al in their Jharkhand study also found some inadequacy in training of ASHA functionaries.^{9,10}

Local community remained uninformed about LCDC activity and ASHA functionaries did not distribute IEC materials before or during the LCDC campaign, though the fault may not be attributed to the ASHA as they were not provided with any IEC material while training. Just half of the ASHA functionaries were correctly marking the houses and 3/4th ASHA functionaries were completing their daily target of house-to-house search. Similar findings were also reported by Rao, Gopalan and Kumar et al.¹¹⁻¹³

Our study had a limited sample size of 49 ASHA workers which makes generalization difficult but it still throws

light on certain problem areas related LCDC and ASHA training.

CONCLUSION

In India ASHA workers are the main health functionaries for LCDC activity and in this study we found that quality of orientation training was substandard as compared to GOI guidelines. This may adversely affect the LCDC activity. So, every effort should be given to make orientation training successful. All the ASHA functionaries should have prior information regarding orientation training. Their active participation in orientation training is a key to make LCDC activity successful. Practical exercises should be made compulsory during orientation training. IEC activities need to be improved before and during LCDC activity. Supportive supervision of ASHA functionaries is very essential as this motivates as well as supports them during field activity.

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