

**Original Research Paper****Community based study of knowledge, attitude and practices towards leprosy in an urban slum in Secunderabad, Telangana**

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Email: [indira45@gmail.com](mailto:indira45@gmail.com) Phone: 040 27502856**Abstract**

Early detection of leprosy depends almost completely on voluntary reporting which means knowledge of leprosy regarding its presenting symptoms, causes, transmission, treatment and cure is required. Decreasing awareness can lead to discrimination and stigmatization of leprosy patients. Information, education and communication (IEC) activities have come down drastically in the past two decades with decreasing trends in the leprosy. A community based study was conducted to know the knowledge, attitude and practices towards leprosy in an urban slum in Secunderabad. 100 subjects above 18 years were included in the study. Data was collected on a pretested questionnaire and was analyzed using Epi Info soft ware. Results showed lack of knowledge about the presenting features, cause, transmission and cure of leprosy in the community. Attitude towards leprosy patients is mostly negative with a feeling of pity. Community was more willing to accept the leprosy person if he is a family member rather than an outsider. They were not willing to sit beside, work with, shake hands, share food or buy food or house leprosy patients. Most of the study population was not willing to accept family member marrying leprosy patients. In the post elimination phase where we want to bring down the case load to zero, complacency in the leprosy activities can be detrimental to the society. The need for intensified leprosy IEC activities is emphasized.

**Key words:** Leprosy, Knowledge, attitude and practices, KAP studies, stigma, community**Introduction**

India achieved leprosy elimination target of less than one case per 10,000 population in December 2005<sup>[1]</sup> With attainment of leprosy elimination goal, leprosy services were integrated with the General Health Services. Information, education

and communication (IEC) activities took a back seat with decreasing prevalence of leprosy. There is a lower allocation of funds for leprosy as funds are spent more on emerging diseases like HIV. 1,26,913 cases were reported from India out of 2,15,656 global leprosy cases in 2013<sup>[2]</sup>. India

contributes to 58.8% of new cases detected globally<sup>3</sup>. Various studies showed grade II deformities in 15.08% to 58.4% of patients<sup>[4-6]</sup>. Early detection of leprosy depends almost completely on voluntary reporting which means knowledge of leprosy regarding its presenting symptoms, causes, transmission, treatment and cure is required. Decreasing awareness can lead to discrimination and stigmatization of leprosy patients. This study was conducted to know the knowledge, attitude and practices in the community of an urban slum in Secunderabad in this post elimination era of decreased IEC activities.

### Materials and Methods

A cross sectional study was conducted in an urban slum area of Bhoiguda, Secunderabad, in the month of September 2016. A convenient sample of 100 subjects was selected by simple random sampling. Data was collected by pretested questionnaire. The questionnaire was prepared on the knowledge, attitude and practices regarding leprosy and included both open and closed ended questions. All the subjects who are aged 18 and above and gave consent to participate were included in the study. Data collected was analyzed using Epi Info 7.1 software.

### Results

The study population included 100 subjects above the age of 18 years. The minimum age was 18 years and maximum was 85 years. Majority of study population was in 18 – 37 years age group. There were 30 males and 70 females in the study, 20% were illiterate and never attended school. 80% were literate and attended school at least upto primary level. 60% were unemployed and consisted mostly of house wives. Only 4 were professionals. 11% belonged to class I, 13% to class II, 37% to class III, 31% class IV and 8% belonged to class V of B.G. Prasad classification of socioeconomic status.

27% knew that skin patches as a presenting sign of leprosy. Majority were unaware that nodules

(83%), loss of sensation (86%) and deformities (73%) occur in leprosy. (Table 1)

56% were unaware of the cause of leprosy. 10% believe that unclean environment as a cause of leprosy, 6% believe that it is hereditary. Only 8% knew that it is spread by germs. Other causes implicated were food, punishment for sins and vitamin deficiency. None of the study subjects believed in witchcraft as a cause of leprosy.

72% were not aware regarding transmission of leprosy. Transmission occurring through air and skin contact was known only to 7% and 5% respectively. Only a few people believed that sitting (1%), sharing towels (4%), sharing food (2%) transmitted leprosy. 6% believed in mother to child transmission.(Table 2)

55% were unaware whether leprosy is curable or not. 29% believe that it is curable and 16% feel that leprosy is not curable.(Table 3) 58% knew that leprosy could be treated with drugs. 35% did not know how leprosy is treated. Avoiding taboo foods (2%), herbal medicines (3%), and performing religious rituals (2%) were considered as treatment for leprosy.(Table 4)

Overall the knowledge regarding presenting symptoms, cause, treatment and curability of leprosy is very poor in the study population.

### Attitude and practices

The commonest response of study population when they see a leprosy patient was to feel pity (53%). 56% mentioned that they will avoid leprosy patients out of fear. 57% were willing to accept a leprosy person, if he/she is a family member but only 21% were willing to accept an outsider.

People were unwilling to sit (42%), work (42%), shake hands (57%), share food (63%), buy food (52%), house leprosy patient (61%) and send children to play with children of leprosy patients (56%). A few of them expressed a neutral attitude Majority had objection to patients using public transport (40%), marrying leprosy patients into their family (66%) but had no objection to leprosy patients attending public functions.(Table 5)

**Table 1**

## Knowledge about Presenting features of Leprosy

1. Skin patches	%
Yes	27
No	4
Don't know	69
2. Nodules	
Yes	17
No	5
Don't know	78
3. Loss of sensations	
Yes	14
No	8
Don't know	78
4. Deformities	
Yes	27
No	5
Don't know	68

**Table 2**

## Knowledge about Transmission

Air	7
Soil	0
Bathing in river	0
Insects	2
Sexual contact	7
Skin contact	5
Sitting beside leprosy pt	1
Eating food with leprosy pt	2
Sharing towels	4
Mother to child	0
Don't know	72

**Table 3**

## Knowledge about Cure

Yes	29
No	16
Don't know	55

**Table 4**

## Knowledge about Treatment

Drugs	58
Taboo foods	3
Medicinal herbs	2
Religious rituals	2
Isolation of patient	0
Don't know	35

**Table 5.** Attitudes and practices

Se.no		yes	Neutral	No
1	sit beside a leprosy patient	34	22	42
2	shake hands with leprosy patient	27	16	51
3	share food with a leprosy patient	24	14	63
4	buy food from a leprosy patient	23	15	62
5	work in the same environment with a leprosy patient	41	17	42
6	house a leprosy patient	20	19	61
7	friends with a leprosy patient	28	21	51
8	not allow children from playing with a child of a leprosy patient	31	13	56
9	allowed to use public transport	37	23	40
10	allowed to attend public functions	36	30	34
11	allow a cured leprosy patient to marry a member of my family	21	16	63
12	avoid leprosy patient	56	0	44

### Discussion

The present study was conducted in an urban slum area of Secunderabad. The age of the patients ranged from 18 to 85 years. Majority (56%) belonged to 18 to 37 years age group. There were more females (70%) than males in the group. Majority were literates who attended school at least up to primary level, and belonged to class II and III of B.G. Prasad classification of socioeconomic status as the study was done in an urban slum area.

The knowledge regarding the presenting signs of leprosy like patches, nodules, loss of sensations and deformities is very poor in the community studied. 72% did not know the routes of transmission of leprosy. A very few people knew that leprosy is spread through air and skin contact. 56% did not know the cause of leprosy. Only 8% knew that leprosy is caused by germs. Curability of leprosy is not known to majority of the people studied.

Attitudes and practices of community towards leprosy were mostly negative though there was a feeling of pity towards leprosy patients in majority of study population. Acceptance of leprosy patient was more if the person is a family member rather than an outsider. People were not willing to sit beside, work with, shake hands, share food or buy food, using public transport and house a leprosy patient. They were also not willing to send their children to play with children of leprosy patients.

People objected to family members marrying leprosy patients. They had no objection to leprosy patients attending social functions.

The results of present study were consistent with the study conducted by AS John and PSS Rao in an urban slum in Kolkata who concluded that while most respondents in their study felt that leprosy is curable and knew where to obtain treatment, a large percentage of the population do not know the early signs and symptoms of leprosy and the importance of early treatment. They are still wary of associating closely with leprosy affected persons<sup>[7]</sup>. Barkatakin et al found similar lack of knowledge in the community in their comparative study of knowledge and attitude in three groups - leprosy patients, non leprosy patients and community. They found that almost everyone in the three groups knew of leprosy, but only a larger proportion of leprosy patients (60%) mentioned anaesthetic patch, as compared to about 20% or less in the other groups. About 20-30% of the leprosy affected, but nearly 50-60% in the other groups stated that there was discrimination<sup>[8]</sup>.

### Conclusion

Overall the present study showed a negative attitude towards leprosy patients in the community, which is probably stemming from lack of knowledge and uncertainty about leprosy and a poor knowledge regarding presenting

symptoms and signs, cause, transmission, curability of leprosy. Decreased IEC activities in the past two decades are probably responsible for decreased awareness in the community. In the post elimination phase, where the case load has to be brought to zero, complacency in the leprosy activities is not expected. In fact an intensified IEC activities passing on the messages of early signs of leprosy, its curability, to support leprosy patients and not to fear leprosy, is the need of the hour.

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