



## KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING LEPROSY AMONG DERMATOLOGY PATIENTS IN A TERTIARY CARE CENTER IN TELANGANA

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### Abstract

**Introduction:** Leprosy is a chronic infectious disease that is associated with serious morbidity and is a disease of public health concern because of the case load and the social stigma attached to the disease. The advance in multidrug therapy in the past 50 years has prompted a drastic decrease in the prevalence of leprosy. However, 105 endemic countries, specifically located in South east Asia, in the Americas, Africa, Eastern Pacific and Western Mediterranean, still concentrate a large number of cases.

**Materials and Methods:** A cross-sectional study was carried out among 300 patients attending the Department of DVL, Patancheru Government district hospital, selected by systematic random sampling from October 2021 to June 2022. Information regarding the knowledge, attitudes and practices towards leprosy was obtained using a structured questionnaire, which was designed in both English and Telugu. The study subjects included were of 15 years of age and above. The questionnaire included socio-demographic variables like age, sex, educational status, marital status, occupation and income of the household.

**Results:** About 45.6% respondents were in the age group 15-30 years, 35.3% between 31-50 years and 19% were above 50 years of age. Among them 68% were male and 32% female. About 10% were illiterate, 13% had primary schooling, 20% were Xth pass, 12% were XIIth pass and 29% were graduates. About 60% had an income greater than Rs. 15,000 and were private employees. About 72% were Hindu by religion. A 51% of those interviewed had no knowledge of the disease. An 80% of them were less than 25 years of age. Among those with knowledge of leprosy, nearly 50% believed that leprosy is highly infectious and easily communicable. A 73.68% stated that leprosy is caused by germs. Some believed that leprosy was caused by unclean environment (52.63%), dirty food (42.1%), vitamin deficiency (47.36%) and impure blood (52.36%).

**Conclusion:** In order to achieve the target of total eradication there is a need to intensify awareness about the symptoms of the disease, its treatment and prognosis so that early detection can be ensured.

**Key Words:** Leprosy, knowledge, attitudes, practices, vitamin deficiency.

### INTRODUCTION

Leprosy is a chronic infectious disease that is associated with serious morbidity and is a disease of public health concern because of the case load and the social stigma attached to the disease. The

advance in multidrug therapy in the past 50 years has prompted a drastic decrease in the prevalence of leprosy.<sup>1</sup> However, 105 endemic countries, specifically located in Southeast Asia, in the Americas, Africa, Eastern Pacific and Western Mediterranean, still concentrate a large number of cases.<sup>2</sup> There were over 210,000 new patients diagnosed in the world each year, leprosy is still a public health problem in many low and middle-income countries.<sup>3</sup>

Late detection of leprosy is related to misdiagnosis, inadequate or incorrect knowledge about the disease as well as negative beliefs and attitude about leprosy among persons affected and their families. Several studies attributed delayed diagnosis of leprosy to the use of traditional medicine and/or low awareness of modern treatment, ignorance of leprosy, unavailability of services, and stigma associated with the disease.<sup>4</sup>

Despite availability of accurate diagnostic techniques and effective therapy, such high numbers indicate inadequate and incorrect knowledge and awareness with widespread ignorance regarding the early signs, symptoms and treatment of leprosy.<sup>5</sup>

This study was conducted with the aim to assess the level of knowledge, social attitude and practices (KAP) among general public regarding leprosy.

## **MATERIALS AND METHODS**

A cross-sectional study was carried out among 300 patients attending the Department of DVL, Government district Hospital - Patancheru, selected by systematic random sampling from October 2021 to June 2022.

Information regarding the knowledge, attitudes and practices towards leprosy was obtained using a structured questionnaire, which was designed in both English and Telugu.

The study subjects included were of 15 years of age and above. The questionnaire included socio-demographic variables like age, sex, educational status, marital status, occupation and income of the household. The questionnaire focused on knowledge and beliefs regarding the cause and transmission of leprosy, attitudes towards leprosy patients and practices towards leprosy patients.

The responses of 'yes,' 'no' and 'do not know' were used for questions that assessed knowledge and beliefs, whereas the attitude was assessed using a Likert scale.

The data thus obtained was analyzed using SPSSv22.0.

## **RESULTS**

About 45.6% respondents were in the age group 15-30 years, 35.3% between 31-50 years and 19% were above 50 years of age. Among them 68% were male and 32% female.

About 10% were illiterate, 13% had primary schooling, 20% were Xth pass, 12% were XIIth pass and 29% were graduates.

About 60% had an income greater than Rs. 15,000 and were private employees. About 72% were Hindu by religion.

A 51% of those interviewed had no knowledge of the disease. An 80% of them were less than 25 years of age. Among those with knowledge of leprosy, nearly 50% believed that leprosy is highly infectious and easily communicable.

A 73.68% stated that leprosy is caused by germs. Some believed that leprosy was caused by a clean environment (52.63%), dirty food (42.1%), vitamin deficiency (47.36%) and impure blood (52.36%).

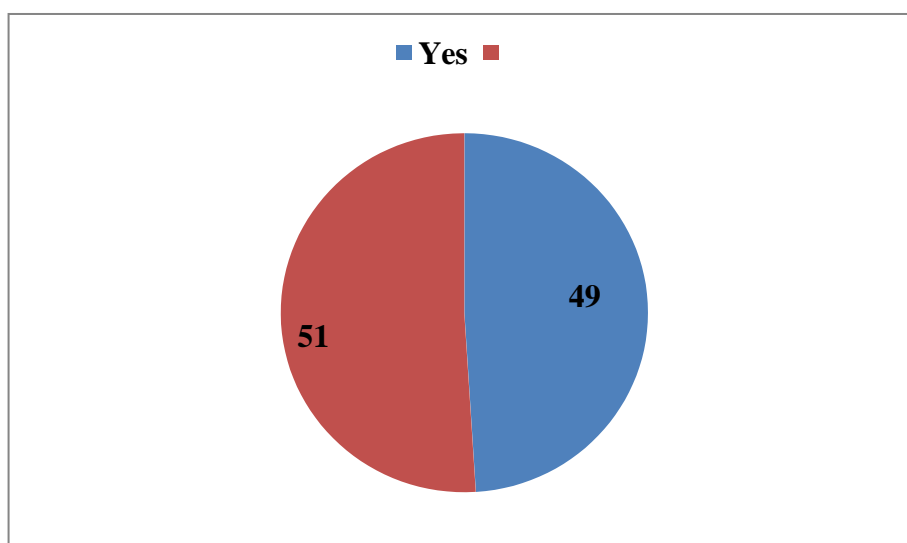
People were doubtful about the mode of transmission of leprosy; 43.42% believed that it is airborne, 23.8% believed that it is caused by insect bite, 59.21% thought sharing personal items is the cause, 36.84% thought eating food together, 32.89% thought it is hereditary, 26.31% thought sexual transmission is the cause and 25% believed that shaking hands could cause leprosy.

S. No	Gender	Percentage
1	Male	68%
2	Female	32%

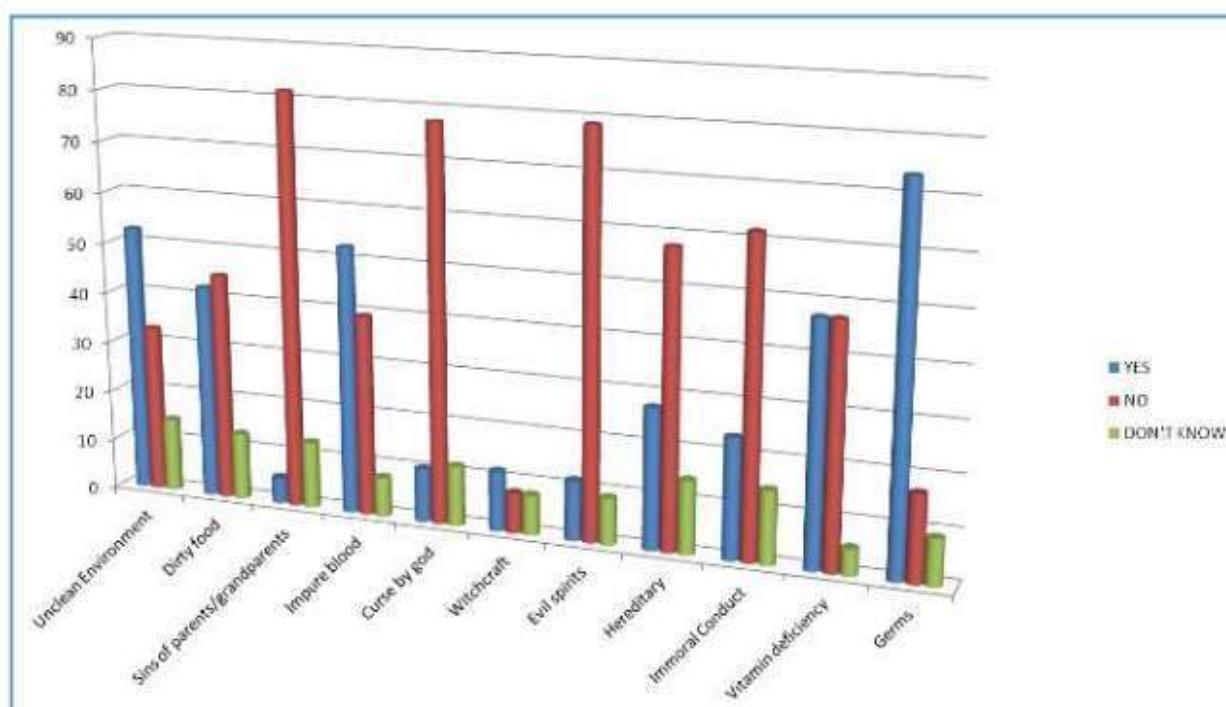
**Table 1: Gender distribution**

S. No	Literacy Level	Percentage
1	Graduate	68%
2	Intermediate	32%
3	SSC	20%
4	Primary Education	13%
5	Illiterate	10%

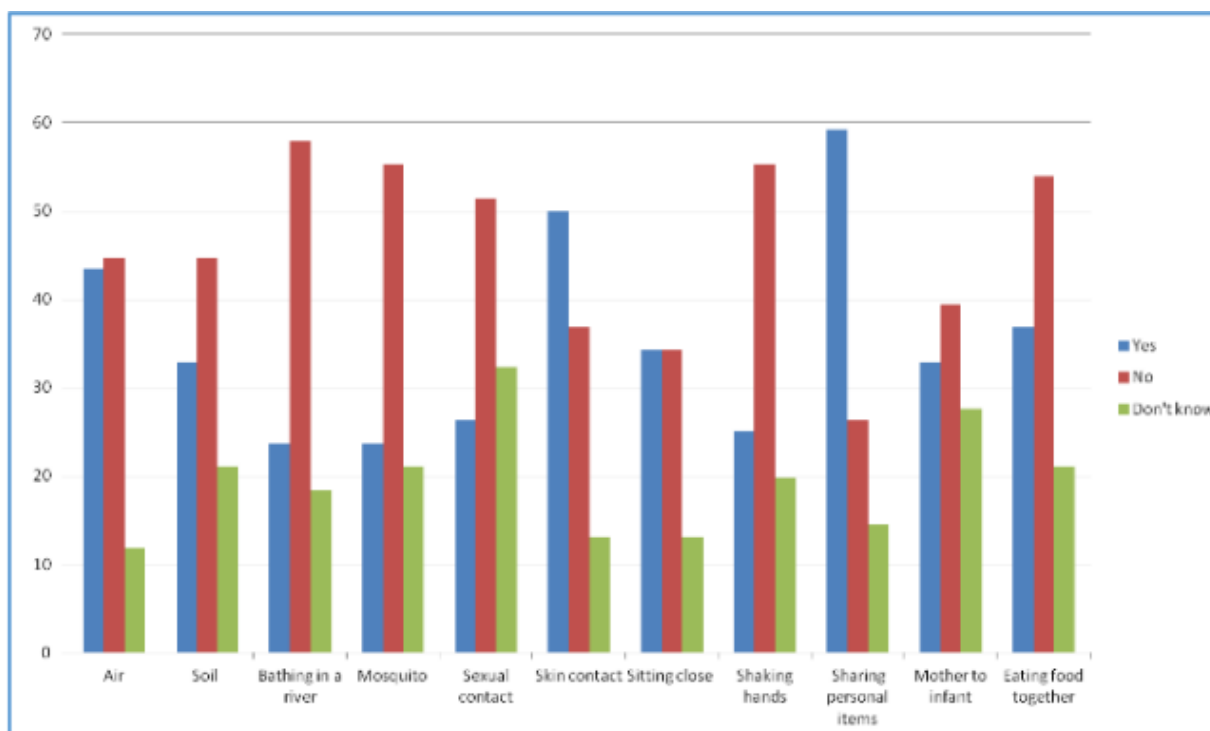
**Table 2: Literacy Level of the Respondents**



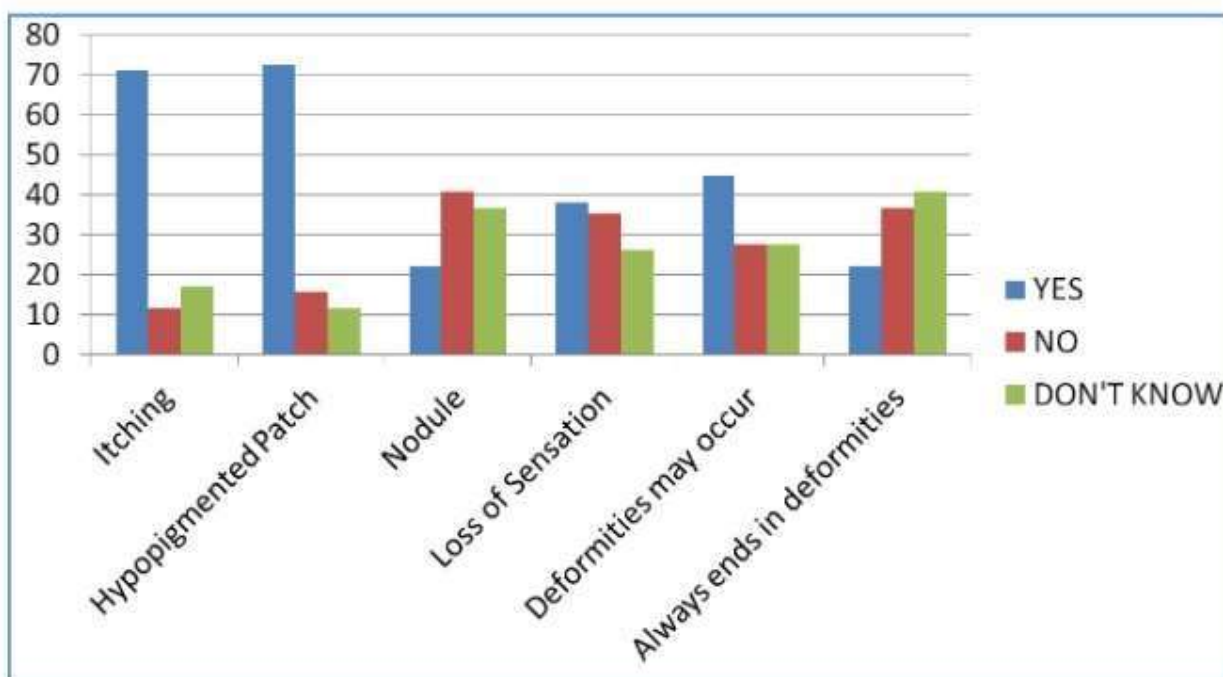
**Figure 1: Knowledge about Leprosy among Respondents**



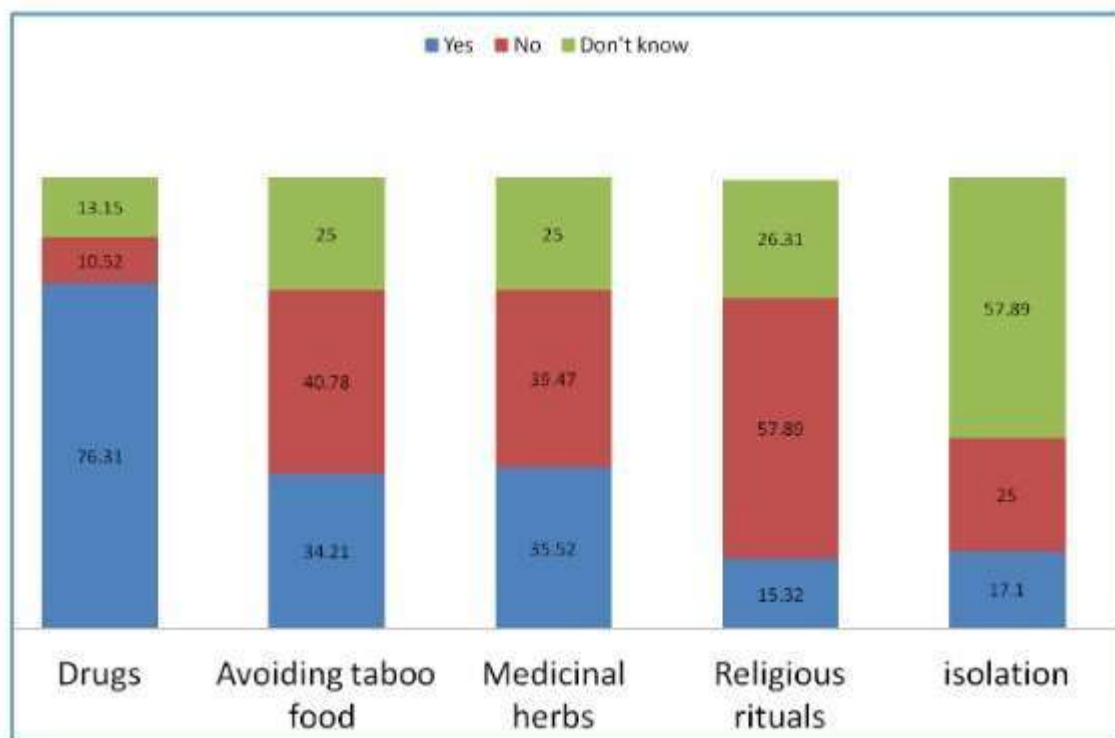
**Figure 2: Knowledge about Cause of Leprosy**



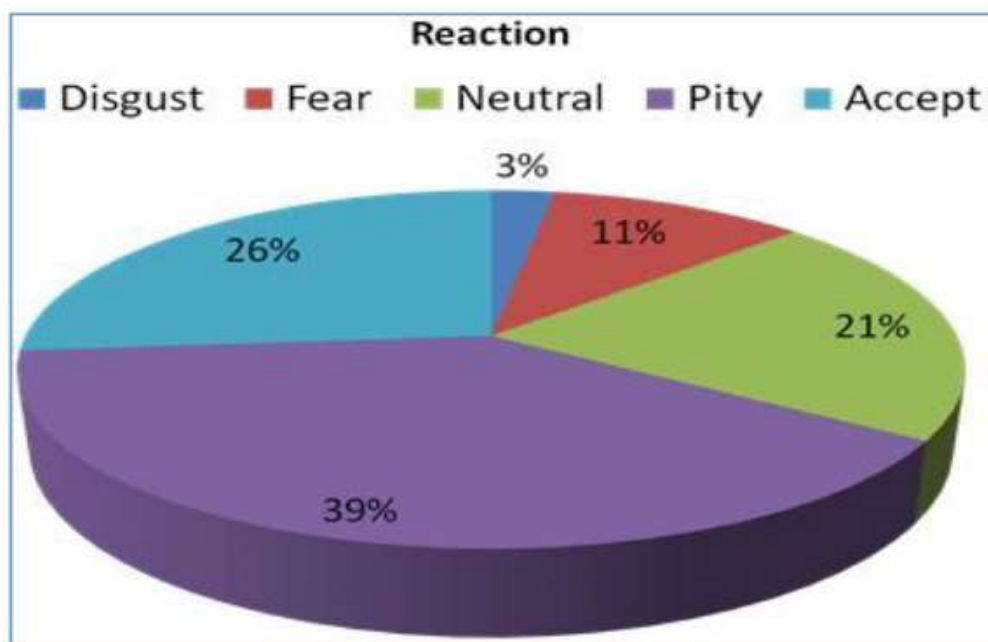
**Figure 3: Knowledge about Transmission of Leprosy**



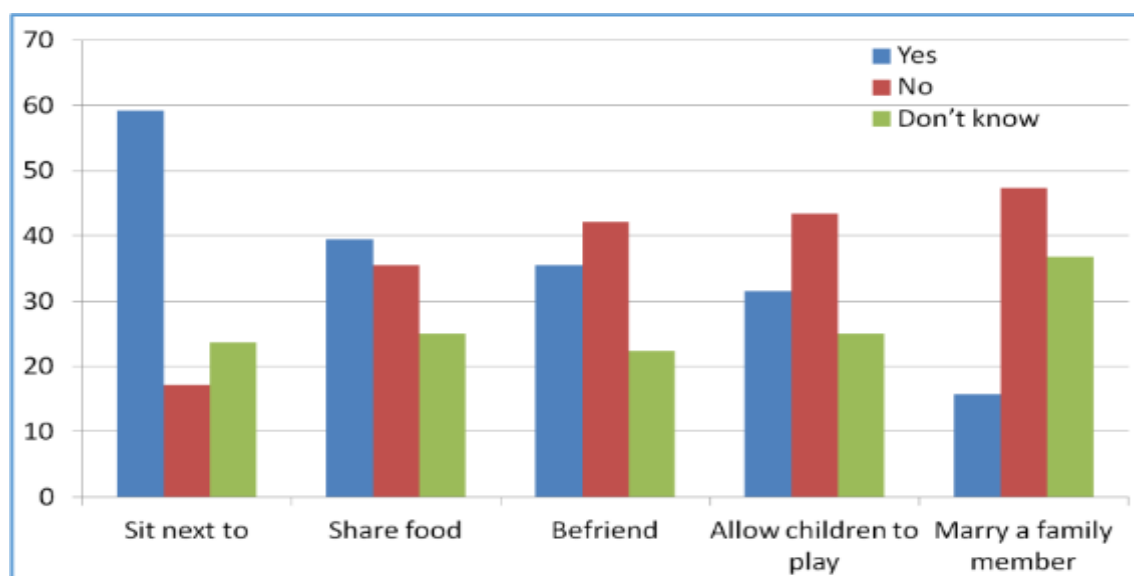
**Figure 4: Knowledge about Symptoms and Signs of Leprosy**



**Figure 5: Knowledge about Treatment of Leprosy**



**Figure 6: Reaction towards Leprosy Patient**



**Figure 7: Attitude towards Leprosy Patient**

## DISCUSSION

Findings in agreement with prior work include attribution of leprosy to bad blood, and diet and the misplaced notion of extreme contagiousness by casual contact and heritability. Apart from ignorance of general public, ignorance of healthcare professionals. Also helps perpetuate such myths; ultimately such misconceptions generate negative attitudes and stigma.<sup>6</sup>

We found good awareness of treatability; however, awareness about MDT and approximate treatment duration were rather unsatisfactory.

Findings concordant with earlier work include strong emotional reactions towards leprosy like fear, disgust. Other findings in line with prior research were marked reluctance for matrimony. Physical contact and sharing of food. In addition, we found strong support for separation from children and significant advocacy for complete segregation. Reluctance to travel with leprosy patients and to allow leprosy patients to attend social functions has also been reported. A limitation of such studies including ours is the tendency to give socially desirable responses.<sup>7</sup>

Although most respondents were aware that germs caused leprosy, many of these respondents also held other multiple beliefs regarding the causation of the disease. With increasing age of the respondents, the knowledge of signs and symptoms of leprosy and the fact that it was caused by germs also increased. Fewer respondents who were young or had had a higher level of education believed leprosy to be hereditary.

Stigmatizing attitudes were high among the respondents who had low overall knowledge of leprosy. The correct beliefs that leprosy was not transmitted by shaking hands or sharing personal items with a person with leprosy were significantly correlated with a positive attitude towards the disease.<sup>8</sup>

Knowledge, attitude, practice studies indicated a lack of accurate knowledge about leprosy among the general population as well as patients. The results from the present study confirms this observation even after several decades of formal leprosy education.

Indian society has treated leprosy as a stigma; a response shaped by both inadequate scientific knowledge and cultural attitudes. Leprosy is still called Kushta in most Indian languages, as it was in Sushruta's time. A lack of awareness of the mode of transmission, early signs and symptoms of the disease, the negative and fearful notions attached with the disease are important factors in hampering leprosy control.<sup>9</sup>

There is a tremendous economic and social cost attached to the delayed diagnosis and management of the disease. Sustaining the gains made so far and further reducing the disease burden in India require an innovative, holistic approach that includes persistent dissemination of information, especially among the youngsters so as to dispel misinformation and stigma. Best results can be achieved essentially by community participation for which vigorous Information, Education,

Communication (IEC) activities are required. Not only this, the treating physician also has to be well trained and sensitive to early signs of the onset of the disease.<sup>10</sup>

## CONCLUSION

It is a fact that inadequate or incorrect information and knowledge about leprosy and its treatment are the root causes of many stigmas and inhibitions prevalent in the various sections of the community, which delay early detection and treatment. In the post leprosy elimination era, the focus of national leprosy elimination programme has shifted from survey and case detection to education of patients and the community at large. Major revamp of strategy is needed to tackle leprosy with a focus on youth. Measures like intensifying public health measures including chapters about diseases like leprosy, polio, etc. in middle/high school text books to generate basic awareness, initiating special campaigns on cable networks/National TV, holding of detection camps, distributing posters and leaflets at Health-Care Facilities, setting up of booths and stalls to distribute literature at important public events/public places/shopping malls, etc. can go along way in creating awareness.

## REFERENCES

1. Nsagha DS, Bamgboye EA and Oyediran AB (2009). Operational barriers to the implementation of multi drug therapy and leprosy elimination in Cameroon. *Indian J Dermatol Venereol Leprol*.75:469-475.
2. Atre SR, Rangan SG, Shetty VP, et al. (2011). Perceptions, health seeking behaviour and access to diagnosis and treatment initiation among previously undetected leprosy cases in rural Maharashtra, India. *Lepr Rev*82:222-234.
3. John AS and Rao PSSS (2009). Awareness and attitudes towards leprosy in urban slums of Kolkata, India. *Indian J Lepr* 81:135-140.
4. Barkataki P, Kumar S, Rao PSS. Knowledge of and attitudes to leprosy among patients and community members: a comparative study in Uttar Pradesh, India. *Lepr Rev* 2006Mar;77(1):62-8.
5. Mankar MJ, Joshi SM, Velankar DH, et al. (2011). A Comparative study of the quality of life, knowledge, attitude and belief about leprosy disease among leprosy patients and community members in Shantivan Leprosy Rehabilitation Centre, Nere, Maharashtra, India. *J Glob Infect Dis* 3:378-382.
6. Bajaj DR, Matlani BL, Soomro FR, et al. (2009). Knowledge, attitude and practices regarding leprosy among general practitioners at Hyderabad. *J Coll Physicians Surg Pak*19:215-218.
7. Briden A and Maguire E (2003). An assessment of knowledge and attitudes towards among leprosy/Hansen's disease workers in Guyana. *Lepr Rev*74:154-162.
8. Heijnders ML (2004a). Experiencing leprosy: perceiving and coping with leprosy and its treatment. A qualitative study conducted in Nepal. *Lepr Rev*75:327-337.
9. Kaur H and Gandhi A (2003). People's perception of leprosy - a study in Delhi. *Indian JLepr*75:37-46.
10. Rao PVR, Rao SLN, Vijaya Krishnan B, Chaudhary AB, Peril S, Reddy BP, et al. Knowledge, attitude and practices about leprosy among medical officers of Hyderabad urban district of Andhra Pradesh. *Indian JLepr* 2007 Mar;79(1):27-43.