KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING LEPROSY AMONG PATIENTS ATTENDING DERMATOLOGY OUTPATIENT DEPARTMENT IN A TERTIARY CARE CENTRE IN WESTERN RAJASTHAN, INDIA.

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ABSTRACT

Despite achieving elimination of leprosy as a public health problem in 2005, India contributes to more than half the global burden of leprosy. Despite availability of accurate diagnostic techniques and effective therapy, such high numbers indicate inadequate and incorrect knowledge with widespread ignorance regarding leprosy.

METHODOLOGY

A cross-sectional study was carried out among 300 patients attending the Dermatology Outpatient Department of our institute, selected by systematic random sampling from January 2014 to March 2014. Information regarding knowledge, attitudes and practices towards leprosy was obtained using a structured questionnaire.

RESULT

Analysis using Statistical Package for the Social Sciences, version 22 (SPSS v22) indicated that only 50% of respondents had knowledge about the disease. However, they were ignorant about the prominent symptoms and signs of the disease. Mis-information about the causes varied from food, unclean environment to impure blood; 70% of those interviewed knew that the disease can be treated by the drugs, but were unaware of the details and duration of treatment.

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.

KEYWORDS

Knowledge, Attitude, Leprosy, Hansen's Disease.

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INTRODUCTION

Leprosy is an infectious disease caused by Mycobacterium leprae. It is acquired through droplet infection. It affects primarily skin and nerves. Even though in 2005 leprosy was eliminated in India (<1 patient per 10,000 population), sadly India still accounts for the world's highest burden of disease with as many as 58 percent of the cases in the world being from India. A total of 1.34 lakh new cases were detected in 2012-13.^[1] The fact that many among these were young children is a major cause of concern and it indicates the failure of the state machinery to effectively contain the spread of the infection.

National Leprosy Eradication Programme puts the current prevalence rate at 0.73 per 10,000 people (2012-2013). (1) However, many states (Bihar, Maharashtra and West Bengal) still have a very high prevalence of the disease, some even crossing the World Health Organization's standard for eliminating leprosy.

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.

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 Dermatology Outpatient Department of our institute, selected by systematic random sampling from January 2014 to March 2014.

Information regarding the knowledge, attitudes and practices towards leprosy was obtained using a structured questionnaire, which was designed in both English and Hindi. 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 SPSS v22.0

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RESULTS

Demographic Profile of the Respondents

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. (Graph 1) About 10% were illiterate, 13% had primary schooling, 20% were Xth pass, 12% were XIIth pass and 29% were graduates. (Graph 2) 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. (Graph 3). 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%). (Graph 4).

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. (Graph 5).

Less than half (38.1%), the respondents were aware of the fact that sensory loss is a pre-dominant sign of leprosy; 71.05% stated itching, 72.36% stated hypopigmented patch, and 22.36% stated nodule as a sign of leprosy; 44.73% believed that deformities can occur in a patient of leprosy. (Graph 6).

It was reassuring to note that almost 75% stated that leprosy can be treated by drugs, but a majority of the same group did not know the duration of treatment and prognosis. A 34.21% of the respondents believed that it could be cured by avoiding taboo food; 35.52% believed it could be treated by medicinal herbs. Some respondents said that religious rituals can cure the disease, whereas 17% felt that leprosy patients should be isolated during treatment. (Graph 7).

About 39% of the respondents said that they feel pity when they see a leprosy patient; 11% feared them and 3% said that they felt disgusted on coming across leprosy patients. (Graph 8). About 59% said that they will not mind sitting next to a leprosy patient; 39% of the respondents were not comfortable with idea of sharing food with a leprosy patient; 43% of the respondents said that they will not allow their children to play with a leprosy patient and 47% said that they will not marry a family member to a leprosy patient. (Graph 9).

DISCUSSION

Insights gained from our study could help in routine management and counselling of leprosy patients and also in devising larger level strategies to improve general awareness about the disease. Studies from around the world over the years have highlighted gaps in people's knowledge towards this disease.^[2,3,4]

Findings in agreement with prior work include attribution of leprosy to bad blood,^[5,6] and diet^[2] and the misplaced notion of extreme contagiousness by casual contact and heritability.^[6,7] Apart from ignorance of general public, ignorance of healthcare professionals^[8,9] also helps perpetuate such myths; ultimately such misconceptions generate negative attitudes and stigma.^[10]

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.^[2] Other

findings in line with prior research were marked reluctance for matrimony,^[5,11] physical contact.^[10,12] and sharing of food.^[2,7,10] In addition, we found strong support for separation from children and significant advocacy for complete segregation. Reluctance to travel with leprosy patients,^[2] and to allow leprosy patients to attend social functions,^[12] has also been reported. A limitation of such studies including ours is the tendency to give socially desirable responses.

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.

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.^[13]

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.

An early detection and treatment is vital to contain further spread of the disease and ultimately its complete eradication. Family has an important role to play in leprosy control. Family members' knowledge about disease and their relation to the patient within family determine their behavior towards patient's treatment. It is seen that family members who have a detailed knowledge of the disease prove to be better care givers and provide the necessary emotional support to the patient during the course of treatment, subsequent rehabilitation. Only the enlightened and informed public can provide a long term and permanent solution to this social and public health problem.

CONCLUSION

The success of polio eradication programme has highlighted the importance of creating awareness among public for their successful mobilization and active participation.

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 a long way in creating awareness.^[14]

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Graph 1: Sex Distribution of Respondents

Graph 2: Literacy Level of the Respondents

Graph 3: Knowledge about Leprosy among Respondents

Graph 4: Knowledge about Cause of Leprosy

Graph 5: Knowledge about Transmission of Leprosy

Graph 6: Knowledge about Symptoms and Signs of Leprosy

Graph 7: Knowledge about Treatment of Leprosy

Graph 8: Reaction towards Leprosy Patient

Graph 9: Attitude towards Leprosy Patient