



## A STUDY TO ASSESS THE KNOWLEDGE REGARDING LEPROSY AMONG ADULTS

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### ABSTRACT

*Leprosy is a chronic infectious disease caused by Mycobacterium leprae, primarily affecting the skin and peripheral nerves. The present study was conducted to assess the knowledge regarding leprosy among adults and to determine its association with selected socio-demographic variables. A descriptive research design was adopted, and 100 adults were selected using a multistage cluster sampling technique. Data were collected through a structured self-report knowledge questionnaire. The findings indicated that 70% of the adults had average knowledge, 16% had poor knowledge, and only 14% had good knowledge regarding leprosy. A statistically significant association was observed between the level of knowledge and type of family ( $p = 0.008$ ). The study concluded that the overall knowledge of adults regarding leprosy was moderate and highlights the need for appropriate educational interventions to improve awareness and understanding of the disease.*

**Key Words:** *Leprosy, chronic infectious, knowledge, adults.*

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## INTRODUCTION

Leprosy (Hansen's disease) is a chronic infectious disease caused by *Mycobacterium leprae*, primarily affecting the skin and peripheral nerves. In India, the prevalence has markedly declined after the introduction of Multidrug Therapy (MDT), from 57.6 per 10,000 population in 1981 to less than 1 per 10,000 by 2005; however, the disease remains unevenly distributed. Transmission occurs mainly through droplet infection from untreated multibacillary cases. It is characterized by hypopigmented patches with loss of sensation, thickened nerves, and the presence of acid-fast bacilli. Although MDT effectively cures the disease, inadequate awareness about leprosy persists. Therefore, the present study was undertaken to assess knowledge regarding leprosy among adults.

## MATERIALS AND METHODS

A quantitative research approach with a descriptive research design was adopted for the study. The sample consisted of 100 adults selected using a multistage cluster sampling technique. A structured questionnaire was used to assess the knowledge regarding leprosy among adults.

## TOOLS AND TECHNIQUES

The tools consist of 2 sections:

Section A: Socio-demographic data

Section B: Structured knowledge questionnaire to assess the knowledge regarding Leprosy.

## SCORING

20 structured questionnaires were scored in which lower scores indicated poorer and higher scores indicated higher knowledge.

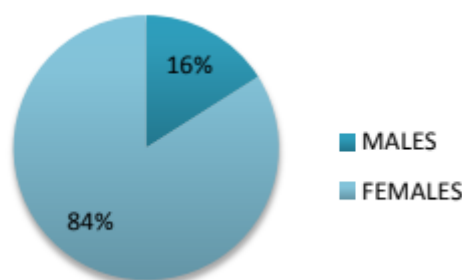
## RELIABILITY OF THE TOOL

A pilot study was conducted among 10 participants who met the inclusion criteria to assess the feasibility of the study and ensure the reliability of the tool. The reliability of the structured knowledge questionnaire was established using the test-retest method. The instrument was administered to the same participants at two different time intervals, and the correlation between the two sets of scores was calculated to determine its reliability.

## SOCIO-DEMOGRAPHIC PERFORMA

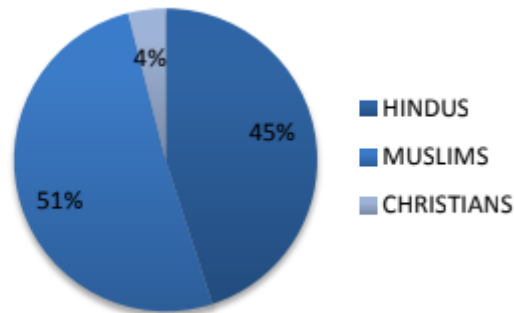
This section presents the socio-demographic characteristics of 100 adults aged between 20 and 60 years residing in the selected wards (Valla Kadavu Ward) of Thiruvananthapuram Corporation. The variables included in this section were gender, religion, type of family, educational status, occupation, monthly income, source of information regarding leprosy, and previous exposure to information about leprosy.

## FREQUENCY AND PERCENTAGE DISTRIBUTION OF PARTICIPANTS ACCORDING TO SOCIO-DEMOGRAPHICVARIABLES

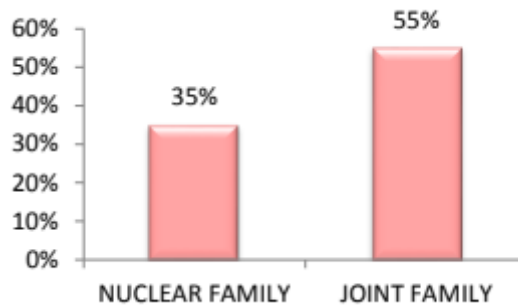


**Fig. 1: Distribution of participants based on gender.**

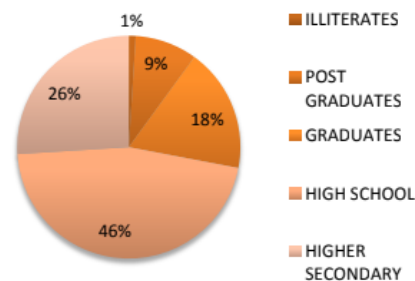
The above figure shows 84% of the adult are females and 16% were males



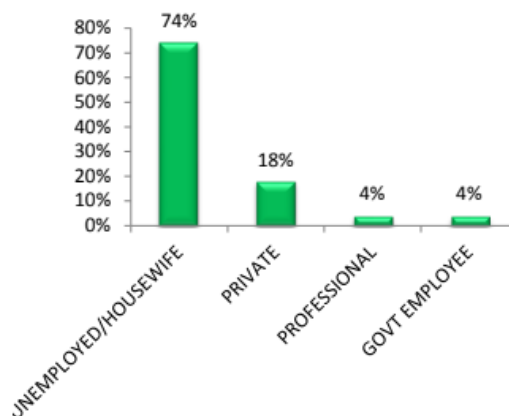
**Fig. 2: Frequency and Percentage Distribution of Participants According to Religion**  
As per the above figure 51% were Muslims, 45% were Hindus and 4% were Christians.



**Fig. 3: Frequency and Percentage Distribution of Participants According to Type of Family.**  
As per figure 3, 55% were from joint family and 35% were from nuclear family

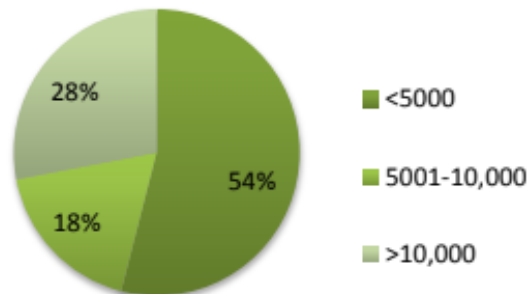


**Fig. 4: Distribution of participants based on education.**  
The above figure illustrate that 46% adult were having high school education, 26% were having higher secondary education, 18% were graduates, 9% were postgraduates and only 1% were illiterates.



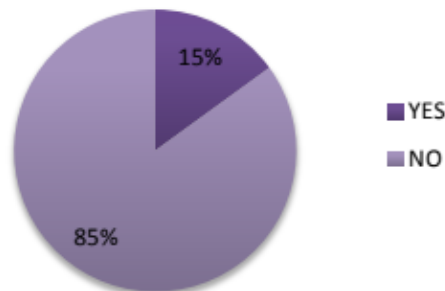
**Fig. 5: Distribution of participants based on occupation.**

The above figure shows that 74% of the adults were unemployed or house wives, 18% were having private jobs, 4% were having professional jobs and another 4% were govt. Employees.



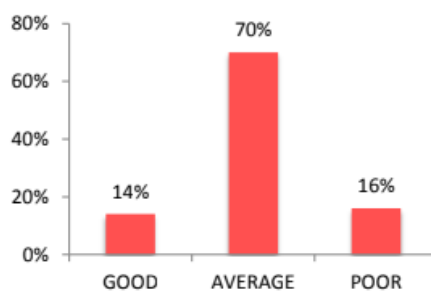
**Fig. 6: Distribution of participants based on monthly income.**

It is evident from the above figure that 54% of the adults have monthly income <5000 rupees, 28% have monthly income above Rs. 10,000 and 18% have income between Rs. 5001-10,000.



**Fig. 7: Distribution of Participants Based on Exposure to Leprosy Awareness Education**

It is evident from the above that 85% of the adults have not attended any classes, whereas 15% of adults have attended awareness classes regarding leprosy.



**Fig. 8: Distribution of adults based on knowledge regarding leprosy.**

As per the above figure, 70% adult had average knowledge, 16% of adults had poor knowledge and only 14% had good knowledge respectively.

**Table .1 Association Between Post-Test Knowledge Score and Selected Socio-Demographic Variables**

Sl. No.	Socio-Demographic Variables	Chi-Square ( $\chi^2$ )	p-Value	df	Significance
1	Gender	0.125	0.939	2	NS
2	Religion	4.403	0.354	4	NS
3	Education	3.017	0.555	4	NS
4	Occupation	3.571	0.168	2	NS
5	Type of Family	9.537	0.008	2	S
6	Monthly Income	4.284	0.369	4	NS
7	Awareness Class	1.443	0.486	2	NS

**Note:** NS – Not Significant S – Significant at  $p < 0.05$  level



The above table shows the association between post-test knowledge scores and selected socio-demographic variables. Among the variables studied, type of family showed a statistically significant association with post-test knowledge score ( $\chi^2 = 9.537$ ,  $p = 0.008$ ). However, gender, religion, education, occupation, monthly income, and awareness class did not show any significant association with post-test knowledge scores.

## DISCUSSION

The present study assessed the knowledge regarding leprosy among adults in selected wards of Thiruvananthapuram Corporation. The findings revealed that 70% of participants had average knowledge, 16% had poor knowledge, and only 14% had good knowledge. Although the majority demonstrated moderate knowledge, the presence of inadequate awareness among a significant proportion indicates persistent gaps in understanding about leprosy. These findings are consistent with a study conducted in Fatehpur, North India, where 12.5% of participants had adequate knowledge and 22% had inadequate knowledge, supporting the results of the present study.

## RECOMMENDATIONS

- A similar study can be conducted on a larger sample to enhance the generalizability of the findings.
- The study can be replicated in different community settings to obtain a broader understanding of knowledge regarding leprosy among adults.
- A quasi-experimental study can be undertaken to assess the effectiveness of educational interventions on knowledge and attitude regarding leprosy among adults.

## CONCLUSION

The present study assessed the knowledge regarding leprosy among adults. Among 100 participants, 14% had good knowledge, 70% had average knowledge, and 16% had poor knowledge. The findings did not support the initial assumption of the study. Overall, the level of knowledge was average, indicating the need for public education and awareness programs on leprosy.

## REFERENCES

1. Park, K. (2011). Preventive and Social Medicine 21st Edition, M/s Banarsidas Bhanot Publishers. K (201 1), 575, 593.
2. <https://www.who.int/news-room/factsheets/detail/leprosy>
3. Haroon, M. A., Dhali, T. K., Siddiqui, S., & Khan, F. A. (2017). Knowledge and Awareness Regarding Leprosy and its Treatment Among Leprosy Patients in a Tertiary Care Hospital.
4. Leena, R., & Priya, K. S. (2017). A study of knowledge and attitude about leprosy among medical students. *Indian J Lepr*, 89(2), 91-97.
5. van 't Noordende, A. T., Korfage, I. J., Lisam, S., Arif, M. A., Kumar, A., & van Brakel, W. H. (2019). The role of perceptions and knowledge of leprosy in the elimination of leprosy: A baseline study in Fatehpur district, northern India. *PLoS neglected tropical diseases*, 13(4), e0007302.
6. Atinkut, Z., Muna, S., & Tesema, A. A. (2018). Knowledge, belief, and attitude of the community towards leprosy patients in Gindeberet Woreda, West Shewa Zone. *Nurs Health Care Int J*, 2(4)