

KNOWLEDGE ON PREVENTION AND ERADICATION OF LEPROSY AMONG COMMUNITY HEALTH WORKERS – A CROSS-SECTIONAL SURVEY

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ABSTRACT

Background: Leprosy currently affects approximately a quarter of a million people throughout the world, with the majority of these cases being reported from India. Objectives are to assess the knowledge on prevention and eradication of leprosy among Community Health Workers, to find the association between knowledge level with selected socio demographic variables. Methods: Cross sectional survey was used for this study. Non-Probability purposive sampling was used and 60 participants were chosen Result: This study revealed that most of the health workers had moderate knowledge on prevention and eradication of leprosy. Conclusion: This study findings showed that, there is a need to improve their knowledge by conducting the educational programmes regarding leprosy and its prevention and eradication.

Keywords: Prevention, eradication, leprosy, community health workers.

INTRODUCTION

In India, leprosy is a prevalent infectious disease that can cause disability and damage to nerves. Both members of the general public and healthcare professionals lack adequate knowledge about leprosy. Delays in identifying new cases and the creation of stigma are caused by this knowledge gap. Regrettably, they frequently lack adequate training on leprosy and its clinical signs. The elimination of this illness may be hampered by a lack of sufficient scientific understanding and a positive outlook, which could have long-term effects on patients' lives.¹

NEED FOR THE STUDY

Leprosy is a treatable illness that is brought on by a recently discovered variation. Leprosy was deemed "eliminated" as a public health issue (less than 1/10,000) in Indonesia and most other countries in 2000 following significant success with the WHO-recommended MDT. Nonetheless, there were still between 2 and 3 million leprosy cases worldwide in 2018. India is the country with the highest number of leprosy patients, followed by Indonesia and Brazil. With 134,752 cases, India has the newest leprosy cases.²

Between January and March 2024, Laura Nanda Prameswari, Ayik Rochyatul Jannah, Nadya Wulandari Alshanti carried out a cross-sectional study at the Pungging Health Community Center in Mojokerto Regency, East Java, Indonesia, using an analytical observational design. The findings showed that healthcare workers who knew enough about leprosy had the best presentation of good stigma (14%), and that stigma against leprosy patients was significantly correlated with healthcare workers' level of leprosy knowledge ($p=0.025$). medical personnel regarding leprosy.³

A descriptive cross-sectional survey was conducted to describe public health care workers' knowledge, attitudes, and practices regarding leprosy in the Colombo Municipal Council area of Sri Lanka. In January and February of 2015, a self-administered questionnaire was distributed to all public healthcare workers ($n = 178$) in the Colombo Municipal Council area. Sixty-one (34.3%) medical professionals were afraid of leprosy, and 77 (43.3%) were reluctant to tell a friend that a family member had the disease. 49 more people (27.5%) refused to give patients access to the materials. The opinion that patients should be kept apart from other people was held by a sizable minority (22.5%). Education about leprosy transmission and low infectivity rates must be prioritized, as a study found that some misconceptions and biases persist even among medical professionals.⁴

Examining the variations and similarities in leprosy knowledge, attitudes, practices, and fears in endemic areas of Indonesia and India was the goal of one study. Participants included leprosy patients, their close friends and family, and medical professionals. 2344 participants were given the KAP measure, EMIC-CSS, and SDS questionnaires. Furthermore, 60 participants participated in focus group

discussions and 110 participants underwent in-depth interviews. The best-known aspects of leprosy in both countries were its treatment and treatability, while the least-known aspects were its cause, mode of transmission, early symptoms, and contagiousness. Health professionals in both nations knew the most about leprosy, while community members knew the most about stigma.⁵

At the Leprosy Rehabilitation Center in Shantivan, a cross-sectional study was carried out. Leprosy patients' and community members' knowledge, attitudes, and perceptions of stigma were assessed using a pre-made and pre-structured questionnaire. Leprosy patients' quality of life was evaluated using the WHO Quality of Life Questionnaire (WHOQOL-BREF). Compared to controls, leprosy patients had a higher general level of knowledge about the disease, its symptoms, how it spreads, and its cure. Discrimination against female leprosy patients was found to be significantly higher than that against male leprosy patients. In the physical and psychological domains, but not in the social relationship and environmental domains, the mean quality of life scores for cases were substantially lower than those for the control group.⁶

In the Dhanusha and Parsa districts of Southern Central Nepal, a study was conducted to evaluate the community members' knowledge, attitudes, and stigmas surrounding leprosy. A structured questionnaire was used to interview 423 people in the districts of Dhanusha and Parsa. Every respondent was aware of leprosy. Hospitals and healthcare professionals were the primary source of leprosy information (33.1%). Just 62.6% of respondents said bacteria were the cause, with 36% citing other myths like bad blood, curses, heredity, or bad deeds. Just 43.8% of respondents said that long-term close contact with leprosy patients is how the disease is spread, and 25.7% said that religious rituals are used as a form of treatment. Just 40.9% had a positive attitude and 42.1% had good knowledge.⁷

STATEMENT OF THE PROBLEM

“Study to assess the knowledge on prevention and eradication of leprosy among Health Workers in selected community Health centres at Gonda.”

OBJECTIVES

1. To assess the knowledge on prevention and eradication of leprosy among Health Workers in selected community Health centers at Gonda.
2. To find the association between knowledge level with selected socio demographic variables.

HYPOTHESIS

3. H₂: There is a significant association between knowledge on prevention and eradication of leprosy among Community Health Workers in selected community Health centers at Gonda.

ASSUMPTION

- Health workers of community health centers may have inadequate knowledge about preventive measures and eradication of leprosy.

DELIMITATIONS

1. The study is delimited to only the ASHA workers of selected urban community health centers.
2. The study is delimited to the information obtained through questionnaire developed by the investigator.

SAMPLE SELECTION CRITERIA

Inclusion Criteria

1. ASHA workers of selected community health centers at Gonda.
2. Health workers who are can read/write and understanding Hindi language.

Exclusion Criteria

1. ASHA workers who are not available during the data collection time.

METHODOLOGY

The research approach used in study was quantitative approach. The investigator adopted a descriptive design. 60 health workers were selected. Samples were selected through non probability purposive sampling technique. Self-administered questionnaire was used to assess the Knowledge on prevention and eradication of leprosy. Structured questionnaire was adopted to collect data and it has 30 multiple choice questions. The collected data was organized and tabulated for analysis.

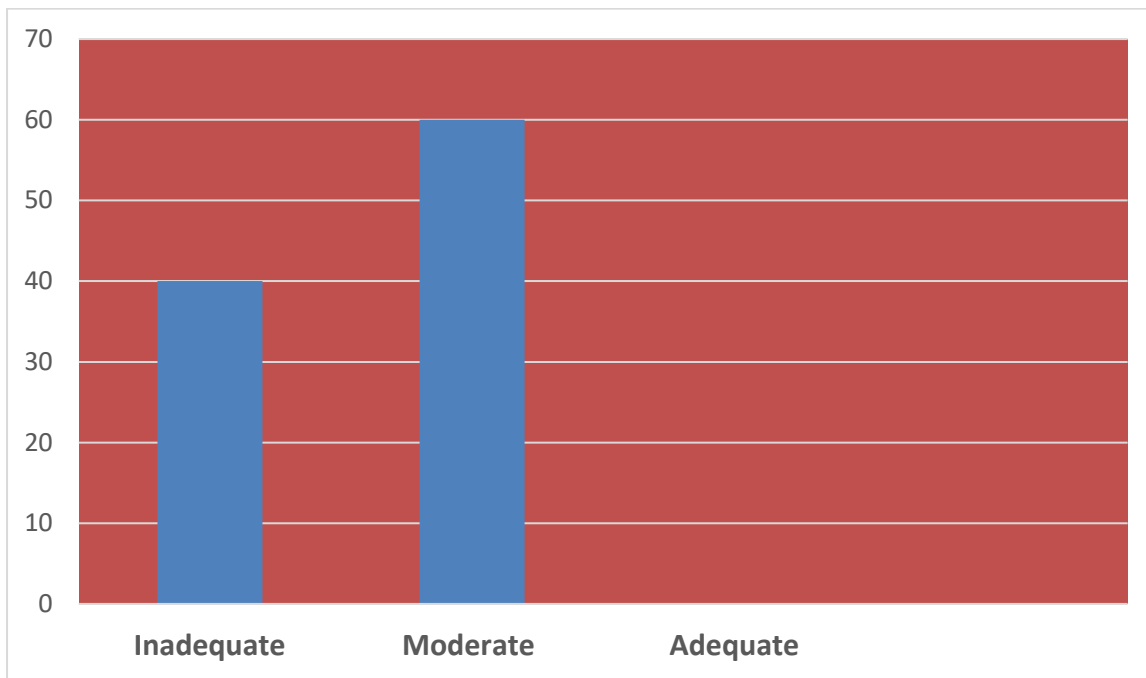
RESULTS

Table 1: Frequency and percentage distribution of knowledge on prevention and eradication of leprosy. N=60

Sl.No	Level of knowledge and Practice	Frequency	Percentage
1	Inadequate	24	40
2	Moderate	36	60
3	Adequate	0	0

The above table 1 showed that 40% of ASHA workers had inadequate knowledge and most of them that is 60% of them had moderate knowledge had moderate knowledge about prevention and eradication of leprosy.

Figure 1: Frequency and percentage distribution of knowledge on prevention and eradication of leprosy.



There is a significant association of knowledge with selected socio demographic variables like age, educational qualification, years of experience as the chi-square value is higher than the table value at 0.05 level of significance. Hence, the hypothesis H2 stated, there is a significant association between the knowledge of ASHA workers with selected socio demographic variables is accepted.

DISCUSSION

The findings of the study stated that demographic variables, most of the participants 53% belonged to the age group between 31-40 years, maximum were Hindus by religion that is 60%. With regard to education, 66% of workers have completed higher secondary education 66%, 47% of subject's family income was more than 15000rs per month and 26.7% had 11-15 years of experience and only 20% had more than 15 years of experience. Most of the workers (60%) were having moderate knowledge, (40%) had inadequate knowledge on prevention and eradication of leprosy. There is a significant association of knowledge with selected socio demographic variables like age, educational qualification, years of experience. Therefore, it rejects the null hypothesis and accepts the alternate hypothesis.

In a study, two surveys were carried out in the pilot districts of Bogra and Moulvibazar utilizing the purposive sampling technique.

The same pretested structured questionnaire was used for the interview. With the exception of TB and Leprosy Control Assistants, all of the providers showed

statistically significant declines in their understanding of supportive counseling at the end-line as compared to the baseline.⁸

CONCLUSION

The study concluded that there is a need of improving the ASHA workers knowledge regarding leprosy and its prevention, rehabilitative measures. The updated leprosy rules are a positive step in the direction of India's aggressive eradication target. Even while the possible advantages—like early diagnosis, easier classification, and quicker treatment—are intriguing, it is still imperative to address the underlying issues of implementation, cost, and stigma. The real success of this updated strategy will depend on striking a balance between affordability and innovation, efficiency and accessibility, and medical improvements and social acceptance.⁹

RECOMMENDATIONS

- ❖ The study can be conducted as a true experimental and quasi experimental design.
- ❖ The impacts of a variety of alternative intervention modalities, which differ in content and methodology, can be investigated.

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REFERENCES

Journal References:

1. Srivastava A, N K, Choudhary S, Mv A. Knowledge, Attitude, and Practices Regarding Leprosy Among Nurses Employed at a Tertiary Healthcare Centre in Central India: An Epidemiological Study. *Cureus*. 2024 Dec 5;16(12):e75157. doi: 10.7759/cureus.75157. PMID: 39759691; PMCID: PMC11699871.
2. Prakoeswa FRS, Soebono H, Husada D et al (2020). Towards Prevention and Eradication of Leprosy : Current Status and Research Needed in Community Health & Immune Dysregulation. : 257-278. *Indian J Lepr*.92: 257-278.
https://www.ijl.org.in/published-articles/03022022161826/4_Prakoeswa_Oct_Dec_2020.pdf#page=21.39
3. Prameswari LN, Jannah AR, Alshanti NW. The Relationship between The Level of Knowledge and Stigma Towards Leprosy Patients among Healthcare Workers. *life*. 2024; 1:2.

4. Wijeratne MP, Østbye T. Knowledge, attitudes and practices relating to leprosy among public health care providers in Colombo, Sri Lanka. *Leprosy review*. 2017 Mar 1;88(1):75-84. DOI: [10.47276/lr.88.1.75](https://doi.org/10.47276/lr.88.1.75)
5. Van't Noordende AT, Lisam S, Ruthindartri P, Sadiq A, Singh V, Arifin M, et al. (2021) Leprosy perceptions and knowledge in endemic districts in India and Indonesia: Differences and commonalities. *PLoS Negl Trop Dis* 15(1): e0009031. <https://doi.org/10.1371/journal.pntd.0009031>
6. Mankar, Madhavi J; Joshi, Sumedha M; Velankar, Deepa H; Mhatre, Ranjana K; Nalgundwar, Aasawari N. 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. *Journal of Global Infectious Diseases* 3(4):p 378-382, Oct–Dec 2011. | DOI: 10.4103/0974-777X.91063
7. Singh R, Singh B, Mahato S (2019) Community knowledge, attitude, and perceived stigma of leprosy amongst community members living in Dhanusha and Parsa districts of Southern Central Nepal. *PLOS Neglected Tropical Diseases* 13(1): e0007075. <https://doi.org/10.1371/journal.pntd.0007075>
8. Kabir, H., Hossain, S. Knowledge on leprosy and its management among primary healthcare providers in two districts of Bangladesh. *BMC Health Serv Res* **19**, 787 (2019). <https://doi.org/10.1186/s12913-019-4525-z>
9. Kumari, Vandna; Mirza, Shahzad Beg. Revised Leprosy Guidelines in India: A Balancing Act of Pros and Cons. *Journal of Global Infectious Diseases* 16(4):p 186-187, Oct–Dec 2024. | DOI: 10.4103/jgid.jgid_158_24