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# A study to assess the knowledge, attitude and belief of society towards leprosy patients and the impact on quality of life of leprosy patients."

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#### ABSTRACT

Leprosy was one of the biggest health problems in India. In India, now leprosy is in control but still belief and attitude towards leprosy patients is unchanged. Leprosy is a social stigma. While reviewing literature researcher developed interest in topic to assess the knowledge, attitude and belief. The negative perceptions may result in reduced quality of life of leprosy patients and hold back their access to health care services. In the perception of community leprosy is a disabling disease that is incurable, hereditary, and associated with dirtiness, oozy and bad smelling wounds. It was found that both the leprosy patients as well as community members were still not sure about the cause of leprosy.

Leprosy is a form of punishment for wrong actions or deeds committed sometime in the past or present life according to perception of community. Very few participants believed that it is caused by a bacterium and more than two fifths (45.7%) believed that skin-to-skin contact with an infectious person could be a possible cause. Breach of taboos and intake of wrong food were other possible reasons for leprosy. 37% of family members of leprosy patients were aware that leprosy is caused by a germ. The negative perceptions may result in reduced quality of life for leprosy patients and holdback their access to health care services. More than half of the participants (54.5%) perceived shame or embarrassment in community due to leprosy. Similarly, 49.8% dislike to buy foods from leprosy patients and 47.1% responded it was difficult to find work for leprosy patients. Prejudice was still present in the wider community and a significant minority believed that patients should be kept apart from other people and emphasis needs to be placed hands. Skin patches and loss of sensation as symptoms of Leprosy were known to 73% of the family members. Almost all stated that leprosy was curable. 60% of the community believes that leprosy is curable while many (64%) believe that it is associated with deformities and disabilities. Most of the community (79%) said it is necessary to attend hospital for leprosy treatment whereas 60% of them felt that it is necessary to segregate leprosy patients.

**Objectives** - To assess the Knowledge, attitude and belief of society members and the Impact on the life of leprosy patients.

**Study setting and period -** The study was conducted at Kothara Community Hospital, Dist- Amravati, and City- Paratwada.

Study Design – Community based cross-sectional study was conducted.

Approach – It was Quantitative

**Study population -** Total sample to assess knowledge, attitude and belief of society was 350 and to assess the Impact sample size was 50. 250-society including various age groups and gender. 50-Healthcare workers, 50-Leprosy Patients.

Sampling Technique - Random Sampling technique was used for collecting data.

## Data collection Tools and procedure

Structured closed ended questionnaire which has four parts was prepared after review of relevant literatures. The first part was to assess socio-demographic data.

The second part was to assess the Knowledge of society members. The third part was to assess the attitude of society. The last part was to assess the belief of society towards Leprosy.

## **Data collection procedure**

Data was collected by the society using Google forms and for Healthcare workers and Patients data was collected manually.

Data analysis and Interpretation

Socio – demographic data

| CHARACTERISTICS | FREQUENCY | PERCENTAGE |
|-----------------|-----------|------------|
| 1. Age :        |           |            |
| 20-30y          | 150       | 42%        |
| 31-40y          | 49        | 11%        |
| 41-50y          | 56        | 16%        |
| 51-60y          | 45        | 12%        |
| 60 and above    | 50        | 14%        |
| 2. Profession : |           |            |
| Service         | 95        | 27%        |
| Business        | 8         | 2%         |
| Housewife       | 67        | 19%        |
| Student         | 130       | 37%        |
| Others          | 50        | 14%        |
| 3. Gender:      |           |            |
| Male            | 200       | 57%        |
| Female          | 150       | 42%        |

Anova: Single Factor

## **SUMMARY**

| Groups    | Сои | nt Sum     | A            | verage          | Variance |
|-----------|-----|------------|--------------|-----------------|----------|
| 3<br>0.06 | 2 2 | 47<br>0.94 | 23.5<br>0.47 | 264.5<br>0.1058 |          |

#### ANOVA

| Source of S<br>Variation | SS      | df | MS       | F         | P-value | F crit  |   |
|--------------------------|---------|----|----------|-----------|---------|---------|---|
| 530                      | 0.380   |    |          | 4.0088380 | 0.18320 | 18.5128 |   |
| Between Group            | s 9     | 1  | 530.3809 | 5         |         | 3       | 2 |
|                          | 264.60  | 05 |          |           |         |         |   |
| Within Groups            | 8       | 2  | 132.3029 |           |         |         |   |
| 7                        | 794.986 |    |          |           |         |         |   |
| Total                    | 7       | 3  |          |           |         |         |   |

Average = Mean

- Variance = Variance
- SS = Sum of Square
- DF = Degree of Freedom

- MS = Mean sum of Square
- F = F test
- P-value = Point Value
- F crit = Statistics critical value

Source of variation- The variation being measured between groups.

SS- The sum of square between groups is 794.9867

df-3 is the Degree of freedom. Between groups is 1 and within groups is 2.

MS-530.3809 is the mean sum of square.

## F- The overall value of between groups and within groups is 4.00883805

**P**-value- The p-value corresponding to the overall F-value is 18.51282.

F-crit- The most important value in this table is the p-value, which turns out to be 18.51282. A one way ANOVA uses the following null and alternative hypothesis-

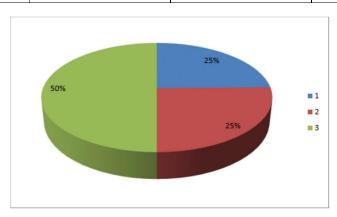
H0- There will be no impact on quality of life of leprosy patients.

H1- There will be impact on quality of life of leprosy patients.

Since the p-value is more than 0.05 we reject the null hypothesis of the one-way Anova and conclude that we have sufficient evidence to say that not all of the group means are equal.

Knowledge of Society about Leprosy

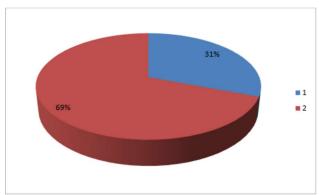
| Knowledge scores |         |     |      |  |
|------------------|---------|-----|------|--|
|                  | Range   | F   | %    |  |
| Poor             | 11 - 23 | 62  | 24.8 |  |
| Average          | 24-36   | 63  | 25.2 |  |
| Good             | 37-50   | 125 | 50   |  |



The above analysis projects that 50% of the respondants were aware of the knowledge about the leprosy patients whereas remaining respondants were unaware 50%.

Attitude of the Society towards Leprosy patients

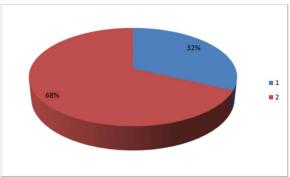
| Knowledge scores |       |     |      |
|------------------|-------|-----|------|
|                  | Range | F   | %    |
| Positive         | 1-13  | 77  | 30.8 |
| Negative         | 14-25 | 173 | 69.2 |



The above diagram demonstrates that 69% of the respondents have a negative attitude towards the leprosy patients. Whereas, 31% shows the positive attitude.

Belief of Society about Leprosy

| Knowledge scores |       |     |    |  |
|------------------|-------|-----|----|--|
|                  | Range | F   | %  |  |
| Positive         | 1-13  | 80  | 32 |  |
| Negative         | 14-25 | 170 | 68 |  |

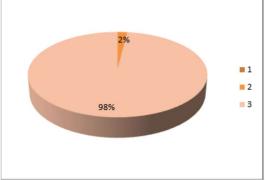


The above diagram demonstrates 68% of respondents has negative belief towards leprosy patients whereas 32% positive belief.

# **Data analysis of Healthcare Workers**

**Knowledge of Healthcare workers about Leprosy** 

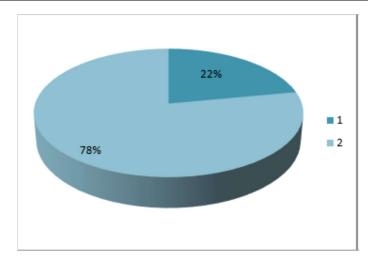
| Knowledge scores |       |    |    |
|------------------|-------|----|----|
|                  | Range | F  | %  |
| Poor             | 11-23 | 0  | 0  |
| Average          | 24-36 | 1  | 2  |
| Good             | 37-50 | 49 | 98 |



The above analysis projects that 98% of the respondents were aware of the knowledge about the Leprosy patients whereas remaining respondents were unaware 2%

**Attitude of Healthcare Workers towards Leprosy** 

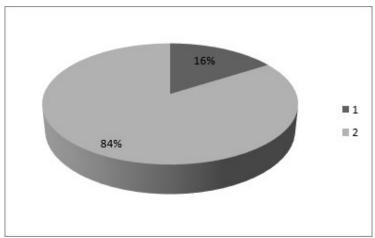
| Atrtitude scores |       |    |    |  |
|------------------|-------|----|----|--|
|                  | Range | F  | %  |  |
| Positive         | 1-13  | 11 | 22 |  |
| Negative         | 14-25 | 39 | 78 |  |



The above diagram demonstrates that  $78\,\%$  of the respondents have a positive attitude towards the leprosy patients. Whereas, 22% shows the negative attitude.

**Belief of Healthcare Workers about Leprosy** 

| Belief scores |       |    |    |  |
|---------------|-------|----|----|--|
|               | Range | F  | %  |  |
| Positive      | 1-13  | 8  | 16 |  |
| Negative      | 14-25 | 42 | 84 |  |

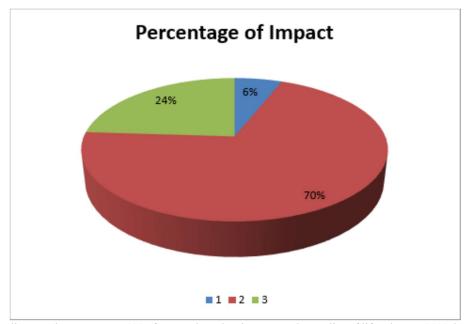


The above diagram demonstrates 84% of respondents has positive belief towards leprosy patients whereas 16% has negative belief.

Data Analysis of the impact on quality of life of Leprosy patients

| Category | Range of scores | Frequency | Percentage |
|----------|-----------------|-----------|------------|
| Poor     | 11 – 23         | 3         | 6%         |
| Average  | 24 – 36         | 35        | 70%        |
| Good     | 37 - 50         | 12        | 24%        |

| SCORES |                   |
|--------|-------------------|
| 5      | Strongly Agree    |
| 4      | Agree             |
| 3      | Neutral           |
| 2      | Disagree          |
| 1      | Strongly disagree |



The above diagram demonstrates 70% of respondents has impact on the quality of life whereas 30% does not have much effect on quality of life.

### Conclusion

The findings of this study suggest that the Healthcare members has enough Knowledge, positive attitude and positive belief towards Leprosy Patients. Whereas, the society members does not have enough knowledge and negative attitude and also belief towards Leprosy Patients. On the other hand it was found that there is impact on the quality of life of Leprosy Patients.

# Limitations

This sample of society members are only limited to the Nagpur city and Leprosy Patients of Kothara Community Hospital.

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