



“Relationship between Psychological Problems and Quality of Life among Leprosy patients in Hyderabad, Telangana”

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ABSTRACT

Depression and anxiety are most prevalent in patients with leprosy, impacting patients' quality of life. This study aimed to assess psychological problems and quality of life among leprosy patients and investigate the relationship between psychological problems and quality of life among leprosy patients. A Descriptive correlational design was utilized to fulfill the aim of this study. The study was conducted at Siva Nanda Leprosy and Rehabilitation center Kukatpally Hyderabad, Telangana. A descriptive study among 310 leprosy patients was recruited consecutively from dermatology and leprosy outpatient. Three tools were used to achieve the aim of this study. A structured Interviewing schedule, the World Health Organization Quality of Life (WHOQOL)-BREF Questionnaire, and Depression Anxiety Stress Scales (DASS). The majority of the studied patients had a low level of quality of life; also, two-thirds had a moderate level of depression, and about two-thirds of them had a severe level of anxiety, while the majority of them had a moderate level of stress; also, more than half of them had a severe level of total DASS. Also, a statistically significant negative correlation between the total quality of life and total DASS among the studied patient with leprosy at p-value ≤ 0.05 . leprosy patients have a low level of quality of life and have a high prevalence of psychological problems present with moderate to severe levels of total depression, anxiety, and stress, which impact their quality of life. The study recommended that continuous counseling and health education for leprosy patients avoid or minimize the psychological problems and improve their quality of life. Psycho-educational program to improve psychological wellbeing and quality of life of leprosy patients.

Keywords: Psychological problems, quality of life, leprosy patients

INTRODUCTION

The biggest disease today is not leprosy or tuberculosis, but rather the feeling of being unwanted. (Mother Teresa)

Leprosy still remains a public health problem in India. Stigma and associated psychosocial problems are common in leprosy and may affect the quality of life (QoL) ¹.

Quality of life (QoL) is the general well-being of an individual or society experiencing the standard of health, comfort, and happiness and it is a highly subjective measure. The World Health Organization (WHO) defines QoL as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns; this definition considers the person's physical and psychological health, social relationships, personal beliefs, environment, and their relationship to salient features of their environment.^[1] The term QOL incorporates the multidimensional nature and perception of overall QoL but often is quoted as the impact of an illness or injury on the QoL.^[2]

Leprosy is a chronic granulomatous infection caused by *Mycobacterium leprae* affecting peripheral nerves, skin, upper respiratory tract, or eyes of which peripheral nerves are the most affinity location. Leprosy is transmitted from human to human through droplet or close contact with leprosy patient. World Health Organization has divided leprosy into 2 types; Paucibacillary leprosy (PB) and multibacillary leprosy (MB). It is an infectious disease that causes severe, disfiguring skin sores and nerve damage in the arms, legs, and skin areas around your body. Leprosy has been around since ancient times. Leprosy is a public health problem <200,000 new cases of leprosy being registered world wide annually, with 62% of cases in India.^[3] In India, a total of 127,334 new cases were detected during the year 2016–2017, and 4.6% of them had Grade 2 disability at the time of diagnosis.^[4]

Leprosy and leprosy-related disabilities may predispose people to develop psychological, economic, and social problems which have an adverse effect on QoL⁵

Leprosy is a disease caused by a type of bacteria called *Mycobacterium leprae*.. These bacteria attack nerves in the hands, feet and face, causing numbness and loss of sensation to those, part of the body. it can also affect the nose and the eyes. Early signs include discoloration or light patches on the skin with loss of sensation. When nerves in the arm are affected, part of the hand becomes numb and small muscles become paralyzed, leading to curling of the fingers and thumb. When leprosy attacks nerves in the legs, it interrupts communication of sensation to the feet. As a result, the person does not feel pain, and can have injuries to their hands and feet without realizing it. The damaged nerves also lead to the skin peeling off, and the tissue beneath the skin is exposed. The signs and symptoms vary considerably, depending on the the signs and symptoms vary considerably, depending on the patient's resistance to the disease. They can be easily missed or mistaken for some other disease.

But leprosy isn't that contagious. It can be spread only if you come into close and repeated contact with nose and mouth droplets from someone with untreated leprosy. Children are more likely to get leprosy than adults.

It usually takes about 3 to 5 years for symptoms to appear after coming into contact with the bacteria that causes leprosy. Some people do not develop symptoms until 20 years later. The time between contact with the bacteria and the appearance of symptoms is called the incubation period. Leprosy's long incubation period makes it very difficult for doctors to determine when and where a person with leprosy got infected. leprosy should be suspected if a person shows the following. They are two types of clinical manifestations depending upon individual immunity levels. If a person has no resistance, the germ multiplies freely in the skin, the lining of the nose and even in deep organs such as the liver. This is lepromatous, or multibacillary leprosy. Other types, including tuberculoid, borderline, indeterminate and polyneuritis leprosy, are made up of just a few bacilli. These are known as paucibacillary leprosy. The classification of cases depends upon the number of patches/skin lesions. One to five patches or lesions on the skin is classified as paucibacillary leprosy, while more than five patches or lesions is called multibacillary leprosy. A trained health worker is capable of differentiating between the two types of leprosy and treating them accordingly. This ranges from 9 months to 20 years. The average is about 4–5 years for tuberculoid leprosy (one or two well-defined lesions), and twice that for lepromatous leprosy (numerous flat or raised, poorly-defined shiny, smooth, symmetrically distributed lesions). However, cases have been identified in children of than 1 year age. Clinical diagnosis is based on complete skin examination doctors also check for sensitivity of patches in the skin rocks, even hot coffee cups. These injuries become infected and result in tissue loss. Fingers and toes become shortened and deformed as the bone is absorbed.

High lighting the achievement of the programme she informed that “the prevalence rate of leprosy has come down from 0.69 per 10,000 population in 2014-15 to 0.45 in 2021-22.

STATEMENT OF THE PROBLEM

“Relationship between Psychological Problems and Quality of Life among Leprosy patients in Hyderabad , Telangana”

OBJECTIVES

- To estimate the levels of psychological problems and quality of life among Leprosy patients.
- To determine the correlation between psychological problems and quality of life among leprosy patients.

To find out the association between psychological problems and quality of life among leprosy patients with their selected demographic variables.

RESEARCH VARIABLES

Age, gender, patterns of leprosy, education level, duration of diagnosis, disability status, anxiety, stress and depression with quality of life

HYPOTHESIS

H1 : There will be significant correlation between Psychological problems and Quality of life among Leprosy patients.

H2 : There will be significant association between Psychological Problems and Quality Of Life among Leprosy Patients with their selected demographic variables.

DELIMITATIONS

The study is delimited to

- Only to tertiary care center for leprosy patients
- Leprosy patients who are willing to participate

ASSUMPTIONS

Leprosy patients might cooperate and relax themselves before answering for the interview

- The information given by the leprosy patients might be honest responses.
- **Reviews related to psychological problems and quality of life.**

Psychological problem among leprosy patients

- **(Mona m. Barakat, Hanan, N. Jaki- 2021)** A descriptive study was conducted in 2019 to assess the psychological status and quality of life among 100 leprosy patients recruited consecutively from dermatology and leprosy outpatient in Benha City, Kaluobias .Data was collected using a structured Interviewing schedule, the World Health Organization Quality of Life (WHOQOL)-BREF Questionnaire, and Depression Anxiety Stress Scales (DASS). Results revealed that the majority of the studied patients had a low level of quality of life; also, two-thirds had a moderate level of depression, and about two-thirds of them had a severe level of anxiety, while the majority of them had a moderate level of stress; also, more than half of them had a severe level of total DASS .Also there was statistically significant negative correlation between the total quality of life and total DASS among the studied patient with leprosy at $p\text{-value} < 0.05$., Low quality of life was seen in 72%.

• Research design

- research design tells the researcher what data to collect, how to collect the data and record it. And how to analysis and interpret data. It also suggests possible conclusions to be drawn from the data. The research design is concerned with an overall framework for conducting the study A Descriptive cross-sectional correlation design
- **RESEARCH APPROCH** : Quantitative research approach
- **RESEARCH DESIGN** : A descriptive cross - sectional correlation design
- A descriptive cross - sectional correlation design
- **TARGET POPULATION** : Leprosy patients in Hyderabad

- **ACCESSIBLE POPULATION**

- Leprosy patients attending Siva Nanda Leprosy and Rehabilitation center

- **SAMPLING TECHNIQUE**

- Consecutive sampling (entire sample who attends OPDs of the setting and meeting the inclusion criteria will be taken till the required sample size met).
- **SAMPLE SIZE** : By using the formula $N = \frac{z^2 pq}{d^2}$ and considering low quality of life as 72 % urban area 72% , acceptable limit of Precision / margin of error as 5% and Z value of 1.96 (confidence level -95%), the expected sample size will be 310. Considering non response rate @10 % the sample size thought to be 341.
- **STATISTICAL ANALYSIS OF DATA** : The data will be entered into Microsoft Excel database and analyzed using SPSS. Descriptive statistics will be used for basic data, Relationship between the variables will be calculated using Pearson correlation test and chi square test. $P < 0.05$ will be regarded as statistically significant.

- **DATA COLLECTION PROCEDURE**

- Interview : There's a plan for describing about the study to the respondents followed by plan for obtaining informed consent ,The interview will consist of gathering information about present demographic and disease status followed by administration of DASS Scale and the WHOQOL-BREF scale
- **Setting of the study:** The study will be conducted at Siva Nanda leprosy and rehabilitation centre, Hyderabad, mainly chosen because the flow rate of patients with leprosy is satisfactory for the study
- **Population of the study:**
- **Target population:** Leprosy patients in Hyderabad
- **Accessible population:** Leprosy patients attending Siva Nanda leprosy and rehabilitation centre
- **Sample:** Patient's diagnosed with leprosy and aged above 18 years who are on treatment or had completed MDT

Description of Tool:

It will have three parts.

Part I:

It consists of demographic variables such as age, gender, educational background, family monthly income, marital status, sources of getting health information, duration of diagnosis, pattern of leprosy, presence of disability, treatment status

Part II: Measurement of psychological problems

Modified Depression Anxiety Stress Scales (DASS-21)

The DASS -21 scale is a four-point rating scale consists of 21 items, is a self-report screening tool that measures the frequency of behaviors or intensity of feelings based on three subscales of Anxiety (DASS-A), Depression (DASS- D), and Stress (DASS-S). all the three sub scales have seven questions each, with maximum score of 63

0 = Did not apply to me

1= Applied to me to some degree, or some of the time

2= Applied to me to a considerable degree or a good part of time

3 = Applied to me very much or most of the time.

Scoring interpretation is as follows

Scoring system for DASS

- 0-21 normal level of DAS.
- 22- 30 mild level of DAS.
- 31-47 moderate level of DAS.
- 48-63 severe level of DAS.

Each sub scale is independently measured by multiplying with two, that means a score of 42 under each sub scale

Part III:

Modified The World Health Organization Quality of Life (WHOQOL- BREF) Questionnaire

It is a five-point Likert scale contains 26 items under four domains:

- The physical domain contains seven items for Q (3, 4, 10, 15, 16, 17, 18)
- The psychological domain contains six items for Q (5, 6, 7, 11, 19, 26)
- The social relations domain contains three items for Q (20, 21, 22)
- The environmental domain contains eight items for Q (8, 9, 12, 13, 14, 23, 24, 25)

The questions Of 1 and 2 deals with over all quality of life and general health which were not included for the interpretation.

- Q3, Q4, and Q26 are reversely scored. Scoring system is
 - More than 75% was considered high QOL.
 - 50-75% was considered moderate QOL.
 - Less than 50% was considered low QOL

Higher the score indicates higher quality of life

Scoring

High QOL- > 80

Moderate -40-80

Low – up to 40

The content validity of the tool was submitted to 5 experts Certainied from following field of

Expertise:

- Community health nursing speciality - 4
- Statistician - 1
- All the 5 experts had given their consensus. the additions and suggestions given by experts were incorporated in the tool and the tool was finalized.

Reliability of the tool A formal Permission has been taken from Senior medical officer Dr. Mrs. Sudha to conduct pilot study. sought prior to the pilot study. pilot study was done on 30 subjects 28 -June -2023 to 30th –June- 2023 among relationship between psychological problems and quality of life among leprosy patient at leprosy referral center Govt lepra society Nallakunta Hyderabad, Telangana.

30 samples were selected as per inclusion criteria and the to measure psychological problems and quality of among leprosy patients. The pilot study revealed that it was feasible and practicable to conduct the main study Face to face interview, The interview consist of gathering information about present demographic and disease status followed by administration of DASS Scale and the WHOQOL-BREF scale

The reliability refers to the accuracy and consistency of measuring the tool.

Tool was tested by Cronbach's alpha formula and the reliability was r indicates

- $\alpha = 0.744$ for DASS and QOL
- Hence tool indicates it was reliable
- Ethical consideration
- This study was conducted after seeking the approval from the ethical committee of apollo institute of medical sciences and research Hyderabad, Telangana. All the respondents were carefully informed about the purpose of the study and their part during the study and how their privacy was guarded. Confidentiality was ensured.

Main study

Prior to the study A formal permission was obtained from the Sivananda Leprosy Rehabilitation center chief administrative Officer Dr. Mr. Anantha Reddy sir

Data collection method:

The data collection for the main study was done for period of 25 days. Prior to study, formal permission was obtained from concerned authority on 30/06/23. The study was conducted between 30th June 2023 to 25th July 2023. The patients who attended OPD of Sivananda leprosy and rehabilitation center were taken as samples. A total of 310 patients who fulfilled the inclusion criteria were selected by using consecutive sampling technique. A brief introduction of self and explanation of the purpose of the study was explained. Patients were made to sit comfortably in OPD and interview was conducted and it took around 45min to collect data for each patient. I could take the samples of around 13 per day.

Plan for Data analysis

The analysis and interpretation was done based on objectives of the study. the purpose of analysis was to concise the data to an interruptible from, so the research problem could be studied and tested

Descriptive statistics

- **Frequency and percentage distribution** of the sample characteristics, level of knowledge & skill were analyzed, tabulated, graphically presented.
- **Comparison of mean and standard deviation** relationship between psychological problems and quality of life among leprosy patients.

Inferential statistics

- **Chi square test** used to find out the correlation between psychological problems and quality of life among leprosy patient and Association between psychological problems and quality of life among leprosy patients with their selected demographic variables.
- **Karl Pearsons coefficient correlation** test uses to find the correlation between psychological problems and quality among leprosy patient

DATA ANALYSIS AND INTERPRETATION**Objectives of the study**

- To estimate the levels of psychological problems and quality of life among Leprosy patients.
- To determine the correlation between psychological problems and quality of life among leprosy patients.
- To find out the association between psychological problems and quality of life among leprosy patients with their selected demographic variables.

- **Organization and presentation of data**

- The data collected from 310 patients was entered in a master sheet for tabulation and statistical analysis. Data was organized and presented under the following headings
- **SECTION I:** Frequency and Percentage distribution of sample characteristics
- **SECTION II**
 - **PART: A** - Assessment of psychological problems among leprosy patients
 - **PART: B** - Assessment of Quality of Life among leprosy patients
- **SECTION III:** Correlation between psychological problems and quality of life among leprosy patients.
- **SECTION IV:** Association between psychological problems and quality of life among leprosy patients with their selected demographic variables.
- the Frequency and percentage distribution of demographic variables relationship between psychological problems and quality of life among leprosy patient a descriptive correlation study with respect to age in years, gender ,religion, Educational qualification, marital status, Number of children, monthly income in rupees, occupational status ,Family support, duration of injury, do you have white patchy skin, presence of disfigurement of leprosy patients
- With respect to age in years, in the descriptive Correlation (51)16.5% leprosy patients belong s to the age group of 18-22 years,(50)16.1% belongs to 23-27years ,(81) 26.1% belongs to 28 – 32 years, (128) 41.3% belongs to 33
- Regarding gender (168)54% were male and (148) 46% were female with leprosy shows that (242)74.8% of leprosy patients belongs to Hindu religion, (51)16.5% belongs to Muslim,(24)7.7% were Christian and (3) 1% of patients belongs to other religion
- Regarding educational qualification status of leprosy patients in which (156)50.3% were no schooling, (127) 41% were primary education, (22)7.7% were higher secondary, (5)2% were graduate
- With respect to un-married patients were (84) 27.1%, married were (203) 65.5%, divorced / separated were (18) 5.8% and widower were (5) 1.6%.
- Regarding leprosy patients (76)24.5% were had single child, (111)35.8% were had 2 children and,(45)14.5% were had 3&more children,(78)25.2% were no had children.
- Regarding occupational status of leprosy patients (25)8.1% were Government employee, (137)44.2% were private employee, (42)13.5% were doing business ,(106)34.2% were doing other works.
- With Regarding (230)74.2% were had family support and (80)25.8% don't have family support
- Regarding duration of injury (113) 36.5% of patients duration of injury is less than 5years,(116) 37.4% of patients duration of injury is 6 – 10 years,(81)26.1%. patients had more than 11 years of injury.
- reveals that (210)68% of patients has white patchy skin and (100)32 % don't have white patchy skin. Reveals that 36.10% patients has Disfigurement of any body part 28.40% don't have disfigurement of any body part, 35.50 % of patients has duration of disfigurement.

Frequency and percentage distribution of Assessment of psychological problems among leprosy patients

The above table depict the frequency and percentage distribution of Assessment of psychological problems among leprosy patients a descriptive correlation study with respect to age in years, gender, Religion, Educational qualification, marital status, Number of children, monthly income in rupees, occupational status, Family support, duration of injury, do you have white patchy skin, presence of disfigurement of leprosy patients

The above table shows that the Assessment of psychological problems among leprosy patients on age group of 18 – 22 years patients 5 (9.8%) had Normal level of psychological problems , 2 (3.9%) were mild , 41(80.4%) were had moderate level of psychological problems ,3(5.9%) were had severe level of psychological problems . 23-27 Years patients 1(2.0%) had normal level of psychological problems , 2(3.9%) were had mild level of psychological problems ,41(80.4%) were had moderate level of psychological problems , 2(4.0%) were had sever level of psychological problems 28-32years patients 0(0.0%) had normal level psychological problems ,2(2.5%) were had mild level of psychological problems , 72(88.9%) were had moderate psychological problems ,7(8.6%)were had severe level of psychological problems ,33&above years patient s 3(2.3%) were had normal level of psychological problems , 16(12.5%) were had mild level of psychological problems , 72(88.9%) were had moderate level of psychological problems

Regarding to gender male patients had 7(4.2%) were normal level of psychological problems , 10(6.0%) were had mild level of psychological problems ,137(81.5%) were had moderate level of psychological problems, 14(8.3) were had severe level of psychological problems, in female patient s were 2(1.4%) had normal level of psychological problems , 12(8.5%) were had mild level of psychological problems, 123(86.6%) were had moderate level of psychological problems ,5(3.5%) were had severe level of psychological problems .

With respect to religion, Hindu 9(3.9%) were had normal level of psychological problems , 19(8.2%)) were had mild level of psychological problems ,191(82.3%)) were had moderate level of psychological problems 13(5.6%)were had severe level of psychological problems ,Muslim 0(0.0%) were had normal level of psychological problems , 3(5.9%) were had mild level of psychological problems ,44(86.3%) were had moderate level of psychological problems, 4(7.8%)were had severe level of psychological problems , Christian were 0(0.0%) were had normal level of psychological problems , 0(0.0%)) were had mild level of psychological problems ,22(91.7%) were had moderate level of psychological problems ,2(8.3%) were had severe level of psychological problems , others there is no patient of normal level of psychological problems ,there is no mild psychological problems of leprosy patient ,3(100%)) were had moderate level of psychological problems ,0(0.0%) were had severe level of psychological problems .

With respect to educational qualification no schooling were 2(1.3%) were had normal level of psychological problems , 15(9.6%) were had mild level of psychological problems , 134(85.9%) were had moderate level of psychological problems ,5(3.2%) were had moderate level of psychological problems , primary education 3(2.4%)) were had normal level of psychological problems , 5(3.9%) were had mild level of psychological problems , 110(86.6%)) were had moderate level of psychological problems , 9(7.1%) were had severe level of psychological problems, higher secondary3(13.6%) were had normal level of psychological problems , 0(0.0%) were had mild level of psychological problems ,14(63.6%) were had moderate psychological problems ,5(22.7%) were had severe level of psychological problems , Graduate 1(20.0%) were had normal level of psychological problems , 2(40%) were had mild level of psychological problems , 2(40%) were had moderate level of psychological problems, severe level nobody having psychological problems .

With respect to marital status un-married patients were 6(7.1%) had normal level of psychological problems,3(3.6%) were had mild level of psychological problems ,68(81.0%) were had moderate psychological problems ,7(8.3%) were had severe level of psychological problems,

Married 3(1.5%) had normal level of psychological problems, 19(9.4%) were had mild level of psychological problems, 169(83.3%) were had moderate psychological problems, 12(5.9%) were had severe level of psychological problems,

Divorced/separated 0(0.0%) had normal level of psychological problems, 0(0.0%) were had mild level of psychological problems, 18(100%) were had moderate psychological problems, 0(0.0%) were had severe level of psychological problems,

Widower 0(0.0%) had normal level of psychological problems, 0(0.0%) were had mild level of psychological problems, 5(100%) were had moderate psychological problems, 0(0.0%) were had severe level of psychological problems,

Number of children single child 0(0.0%) had normal level of psychological problems, 2(2.6%) were had mild level of psychological problems, 69(90%) were had moderate psychological problems, 5(6.6%) were had severe level of psychological problems, child 2(1.8%) had normal level of psychological problems, 10(9.0%) were had mild level of psychological problems, 69(90.8%) were had moderate psychological problems, 7(6.3%) were had severe level of psychological problems, child 2(1.8%) had normal level of psychological problems, 10(9.0%) were had mild level of psychological problems, 69(90.8%) were had moderate psychological problems, 7(6.3%) were had severe level of psychological problems, 3&more had 0(0.0%) had normal level of psychological problems, 9(20%) were had mild level of psychological problems, 36(80%) were had moderate psychological problems, 0(0.0%) were had severe level of psychological problems,

With respect to Monthly Income in rupees Below - 10,000 6(4.8%) were had normal level of psychological problems, 14(11.1%) were had mild level of psychological problems, 100(79.4%) were had moderate level of psychological problems, 6(4.8%) were had severe level of psychological problems, monthly income of 10,001 - 20,000 3(2.2%) were had normal level of psychological problems, 6(4.4%) were had mild level of psychological problems, 117(85.4%) were had moderate level of psychological problems, 11(8.0%) were had severe level of psychological problems, monthly income of 20,001 - 30,000 0(0.0%) were had normal level of psychological problems, 2(5.9%) were had mild level of psychological problems, 31(91.2%) were had moderate level of psychological problems, 1(2.9%) were had severe level of psychological problems, 30,001 – above were had 0(0.0%) normal level of psychological problems, 0(0.0%) were had mild level of psychological problems, 0(0.0%) were had moderate level of psychological problems, 21(92.3%) were had severe level of psychological problems,

Occupational status government employees 1(4.0%) normal level of psychological problems, 0(0.0%) were had mild level of psychological problems, 22(88%) were had moderate level of psychological problems, 2(8%) were had severe level of psychological problems, private employees 2(1.%) normal level of psychological problems, 14(10.2%) were had mild level of psychological problems, 112(81.8%) were had moderate level of psychological problems, 9(6.6%) were had severe level of psychological problem. Business 0(0.0%) normal level of psychological problems, 2(4.8%) were had mild level of psychological problems, 37(88.1%) were had moderate level of psychological problems, 3(7.1%) were had severe level of psychological problem, Others workers 6(5.7%) were had normal level of psychological problems, 6(5.7%) were had mild level of psychological problems, 89(84%) were had moderate level of psychological problems, 5(4.7%) were had severe level of psychological problems.

With respect of Family support patients 8(3.5%) were had normal level of psychological problems, 21(9.1%) were had mild level of psychological problems, 185(80.4%) were had moderate level of psychological problems, 3(3.8%) were had severe level of psychological problems, no family support patients 1(1.3%) were had normal level of psychological problems, 1(1.3%) were had mild level of psychological problems, 75(93.8%) were had moderate level of psychological problems, 3(3.8%) were had severe level of psychological problems.

Duration of injury Less than 5 years

- 5 (4.4 %) were had normal level of psychological problems, 9(8.0%) were had mild level of psychological problems , 91(80.5%) were had moderate level of psychological problems ,8(7.1%) were had severe level of psychological problems, 6 - 10 years 52(1.7%) were had normal level of psychological problems, 6(5.2%) were had mild level of psychological
- 104(89.7%) were had moderate level of psychological problems ,4(3.4 %) were had severe level of psychological problems, More than 11 years 2(2.5%) were had normal level of psychological problems, 7(8.6%) were had mild level of psychological problems , 65(80.2%) were had moderate level of psychological problems ,7(8.6%) were had severe level of psychological problems
- Do you have white patchy skin 6(2.9%) were had normal level of psychological problems ,16(7.6%) were had mild level of psychological problems , 176(82.4%) were had moderate level of psychological problems ,4(4.0%) were had severe level of psychological problems, not present white patchy skin were 3(3.0) were had normal level of psychological problems, 6(6.0%)were had mild level of psychological problems 87(87%) were had moderate level of psychological problems , 4(4.0%) were had severe level of psychological problems.
- Presence of disfigurement in any part of the body due to leprosy were yes 4(1.8%) were had normal level of psychological problems ,19(8.6%) were had mild level of psychological problems, 187(84.2%) were had moderate level of psychological problems ,12(5.4%) were had severe level of psychological problems, 5(5.7%)were had normal level of psychological problems ,3(3.4%) were had mild level of psychological problems, 73(84.2%) were had moderate level of psychological problems ,7(8.0%) were had severe level of psychological problems.

FIG - 1

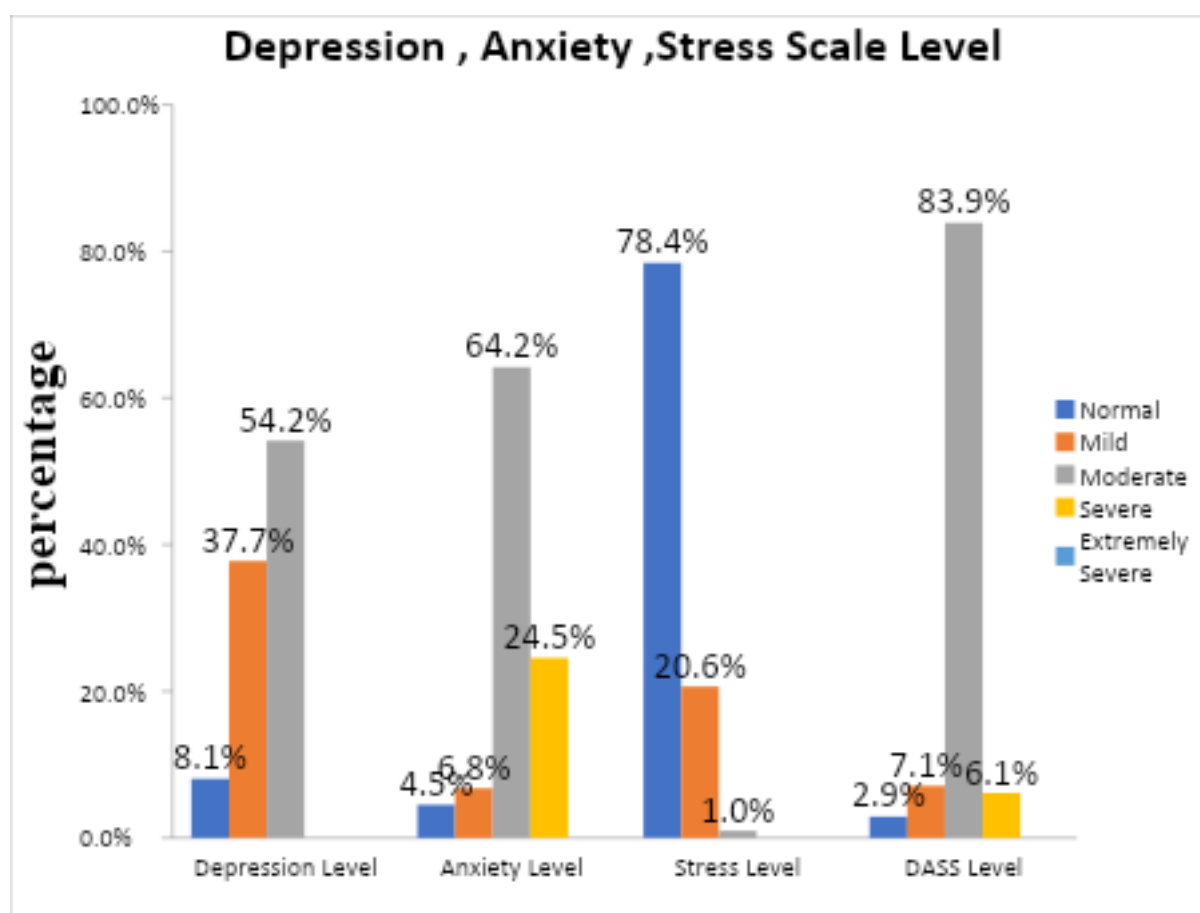


TABLE - 1

DASS SCALE		Normal	Mild	Moderate	Severe	Extremely Severe	Total
Depression Level	F	25	117	168	0	0	310
	%	8.1%	37.7%	54.2%	0.0%	0.0%	100.0%
Anxiety Level	F	14	21	199	76	0	310
	%	4.5%	6.8%	64.2%	24.5%	0.0%	100.0%
Stress Level	F	243	64	3	0	0	310
	%	78.4%	20.6%	1.0%	0.0%	0.0%	100.0%
DASS Level	F	9	22	260	19	0	310
	%	2.9%	7.1%	83.9%	6.1%	0.0%	100.0%

Percentage distribution of psychological problems among leprosy

TABLE - 2

SECTION III

Correlations between psychological problem and quality of life among leprosy patient

n-310

S. NO.	VARIABLES	CORRELATION TEST	CORRELATION VALUE	INFERENCE
1.	PSYCHOLOGICAL PROBLEMS AND QUALITY OF LIFE OF LEPROSY PATIENTS	KARL PEARSON TEST	-.402	Correlation is significant at the 0.01 level (2-tailed).
		Sig. (2-tailed)	.000	

Table : Correlations between psychological problem and quality of life among leprosy patient

The depicts that there is a significant correlation between psychological problems and quality of life among leprosy patients by using Karl Pearson method, the correlation value is - .402 it shows negative correlation

Correlation is significant at the 0.01 level (2-tailed)

Note : NS = Not significant at $p < 0.05$ Level of significant

S = significant at 0.05 level of significance

TABLE - 3

The Association between quality of life among leprosy patients with their selected demographic variables

Dass scale	MEAN	SD
Depression	13.516	2.84029
Anxiety	12.7903	2.68363
Stress	12.4581	2.78284
Dass score	38.700	6.77209

Table : Mean and standard deviation of depression, anxiety, stress scale The above table show depression were mean value is 13.516 ,standard deviation value was 2.840209, anxiety mean value were 12.7903, standard

The study clearly depicts that ,

- There is significant association between selected demographic variables such as Religion,educational qualification ,marital status ,occupational status , Do you have white patchy skin, Presence of disfigurement in any part of the body due to leprosy.
- And the demographic variables such as age, gender , number of children , Monthly income in rupees, Family support , Duration of injury.

association between psychological problems among leprosy patient with selected demographical variables

- There is significant association between selected demographic variables such as age,religion,marital status , educational qualification, family support, monthly income , marital status ,occupational status, number of children,
- And the demographic variables such as gender, duration of injury,white patchy skin,presence of disfigurement in any part the body due to leprosy
- **CHAPTER V**
- **Summary ,discussion ,implications , recommendations and conclusions**
- This chapter deals with the discussion , findings of analysis in relation to the objectives and supportive study , recommendations, summary , conclition and implications of the study . the limitations are put forward and recommendations are suggested
- **Discussions**
- Relationship between psychological problems and quality of life among leprosy patient using of modified DASS SCALE(Depression ,anxiety,stress scale) and WHO quality of life (QOL)scale to assess psycholgal problems and quality of life among leprosy patient . researcher decided to adopt this intervention for this study . in order to reduce

H1 : There will be significant correlation between Psychological problems and Quality of life among Leprosy patients

H2 : There will be significant association between Psychological Problems and Quality Of Life among Leprosy Patients with their selected demographic variables.

Conclusion

Hence, it could conclude that patients with leprosy disease have a low level of quality of life, a low level of the psychological and environmental domain, and a moderate psychological and physical domain level. A significantly high prevalence of psychological problems presents with a severe level of total depression, anxiety, and stress, which impact the quality of life of leprosy patients. A statistically significant negative correlation between the total quality of life and total DASS among the studied patient with leprosy at $p\text{-value} = <0.05$

Implications

The investigator has put forward the following implications from the study which is crucial for nursing practice, nursing education, nursing administration and nursing research.

Nursing practice :

- The community can adopt to measure the psychological problems and quality of life of leprosy patients to easy to find out patient mental condition it is efficient and safe method employed in case of leprosy patients at their community area practice.
- The community health nursing practitioner can utilize this protocol for practicing this study
- The community nurse should disseminate the information about DASS scale and WHOQOL all above 18 years leprosy patients admitted in the health care setting

Nursing Education

- This research has been successfully implemented in Sivananda Leprosy Rehabilitation Center, Kukatpally, Hyderabad.
- The community health nurse administrator along with the administrative bodies and other health agencies can devise a program to focus on measures to psychological problems and quality of life to the leprosy patient.
- The nurse administrator within the institution should motivate and train staff to carry out routine assessment of psychological problems and quality of life among leprosy patients and present an updated incidence of psychological problems and quality of life among leprosy patients and its impact
- The nurse administrator should investigate organizing continuing nursing education, conferences and workshop

Nursing administration

Nursing administrators should take an initiating the relationship between psychological problems and quality of life among Leprosy patients in the community. Patient Training program should be encouraged. and make patients aware about treatment of these medical issues can improve the functioning of the leprosy patient. free health services and by government and medical professionals should be recommended for these patients.

Nursing research

The patients are future of the society and assess the psychological problems affecting their health. there is need to investigate how caring to the patient

Nursing education

In the community curriculum, psychological problems and quality of life is not dealt extensively, so the curriculum should also focus on providing opportunities to student to care for the leprosy patient with leprosy disorder. it will help the student to have a critical skill in identifying the patient who are at risk, of developing disease condition and other disabilities.

Limitations

- The study was limited to 18 to above are diagnosed with leprosy disease condition .
- The researcher planned to took 310 sample for the study
- The investigator found difficulty in getting permission
- The investigator had difficulty to data collection time why because large sample

RECOMMENDATIONS

The present study emphasizes the need for:

- Continuous counseling and health education for persons affected with leprosy to avoid or minimize the psychological problems and improve their quality of life.
- Psycho-educational program to improve psychological wellbeing and quality of life of leprosy patients.
- Promote community integration of leprosy patients by addressing all forms of discrimination and stigma.
- Psychological rehabilitation of people with leprosy deficits to improve quality of life.
- Develop a strategy for leprosy patients, increase the number of skilled specialists and develop programs highlighting the importance of research in leprosy to reduce its complications.

REFERENCES

1. Govindharaj P, Srinivasan S, Darlong J. Quality of life of persons affected by leprosy in an endemic district, West Bengal, India. *Indian J Dermatol* [serial online] 2018 [cited 2022 Aug 4];63:459-64. Available from: <https://www.e-ijd.org/text.asp?2018/63/6/459/244818>
2. Centers for Disease Control and Prevention. Measuring Healthy Days: Population Assessment of Health-Related Quality of life. Atlanta, Georgia: Centers for Disease Control and Prevention; 2000.
3. World Health Organization. Global leprosy update, 2016: Accelerating reduction of disease burden. *Wkly Epidemiol Rec* 2017;92:501-20.
4. National Leprosy Eradication Programme (NLEP). Annual Report 2015 – 2016. New Delhi: Central Leprosy Division Directorate, General of Health Services, Ministry of Health and Family Welfare Government of India. Available from: <http://www.nlep.nic.in/pdf/revised%20annual%20report%2031st%20March%202015-16.pdf>. [Last accessed on 2017 Nov 27]. [↗](#)
5. World Health Organization, South-East Asia. Leprosy: The Disease. Available from: http://www.searo.who.int/entity/leprosy/topics/the_disease/en/. [Last accessed on 2017 Nov 27]
6. Kopparty, SN., Kurup, AM., & Sivaram M. (1995). Problems and coping strategies of families having patients with and without deformities. *Indian Jlepr*, 67(2), 133-52. Lata, CH. & Rebecca, F. (2006).
7. Leprosy: Gale Encyclopedia of Medicine (3rd ed). Legard, R., Keegan, J., & Ward, K. (2003). In depth interviews (1st ed). London, Thousand Oaks, New Delhi: Sage publication. Levitas, R., Pantazis, CH., Fahmy, E., Gorden, D., Lloyd, E., & Patsios, D. (2007).
8. The multidimensional analysis of social exclusion: Department of sociology and school for social policy Townsend center for the international study of poverty and Bristol Institute for Affairs university of Bristol 67 Luka, E.E. (2010).

9. Understanding the stigma of leprosy. Medical journal of southern Sudan. Lusli, M., Zweekhorst, M.B.M., Galarza, B.M., Peters, R.M.H., Cummings, S., Seda, S.S.E., Irwanto (2015).
10. Dealing with stigma: Experiences of persons affected by disability like leprosy. Hindawi publishing corporation, BioMed Research International, volume 2015,
11. Mona M. Barakat¹, Hanan, N. Zaki² Relationship between Psychological Problems and Quality of Life among Leprosy Patients 30 March 2019 **Evidence-Based Nursing Research Vol. 1 No. 2** Article number 4 page 1 of 15
- 12 . VV Pai, S Vhora , P Shukla, A Navya, MS Kulkarni Quality of Life in Patients with Leprosy using WHOQoL -Bref Questionnaire: A descriptive cross-sectional study was conducted in a tertiary care centre among patients 27.02.2022 page no 210
13. Grazielle Ferreira Pinto¹, Raquel Aparecida Rodrigues Nicácio et . al . Factors associated to quality of life in patients with leprosy; A cross-sectional study . 10.31744/einstein_journal/2021AO5936 einstein (São Paulo). 2021;19:1-7