A Study to Assess the Level of Anxiety among Tuberculosis Patients Admitted in Government Hospital, Sasaram, Rohtas-District Bihar

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ABSTRACT
Tuberculosis is one of the leading causes of mortality and morbidity around the world, infecting approximately 8 billion people, with an annual death rate of close to 1 million. India shares almost a third of this global tuberculosis burden. Nearly 2 million incidents cases and half a million deaths annually, tuberculosis is certainly an enormous public health problem in this country. Anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure. In our study anxiety is a condition in which an individual feels ashamed or humiliated at various social setting. Patients with anxiety usually avoid the situations due to their excessive concerns; they commonly isolated themselves from the social interaction. Non experimental survey was conducted in Government Hospital, Sasaram, Rohtas-District Bihar. 30 tuberculosis patients were selected by using Purposive sampling technique. Five point rating scale is used to assess the level of anxiety among the tuberculosis patients admitted in Government Hospital, Sasaram, Rohtas-District Bihar. The collected data was analyzed by using descriptive and inferential statistics. The result of the study shows that 20 (66.7%) the tuberculosis patients had moderate level of anxiety, 10 (33.3%) patients had severe level of anxiety & no one had mild level of anxiety. The study concluded that majority of tuberculosis patient admitted in Government Hospital, Sasaram, Rohtas-District Bihar has moderate level of anxiety (66.7%) and severe level of anxiety (33.3%). In this study, the results reveal that there is association between the demographic variables like age in year, gender, marital status, religion, area of residence and educational status with the level of anxiety.

INTRODUCTION
The World Health Organization, defined health as a state of complete physical, mental, and social well-being and not a merely absence of disease or infirmity. The impact of any disease, especially a chronic illness like tuberculosis, on an individual patient is therefore often all-encompassing, affecting not only his physical health but also his psychological, economic, and social well-being. Although these results provide important information regarding the disease, it is often impossible to separate the disease from the individual's personal and social context, especially in chronic and progressive diseases.

Tuberculosis is one of the leading causes of mortality and morbidity around the world, infecting approximately 8 billion people, with an annual death rate of close to 1 million. India shares almost a third of this global tuberculosis burden. With nearly 2 million incidents cases and half a million deaths annually, tuberculosis is certainly an enormous public health problem in this country.
POPULATION:-
The population for this study consists of all patients with tuberculosis of both male and female admitted in Chest and TB Government Hospital, Sasaram, Rohtas - District Bihar.

SAMPLE:-
The sample of the present study consist of patients with tuberculosis admitted in Tuberculosis & chest unit in Government Hospital, Sasaram, Rohtas-District Bihar during the time of data collection.

SAMPLE SIZE:-
A sample size is 30 patients who are diagnosed with pulmonary tuberculosis and admitted in inpatient department of tuberculosis unit for medical care.

SAMPLING TECHNIQUE:-
Purposive sampling technique will be used for the present study.

RESEARCH VARIABLES:-
Level of Anxiety among tuberculosis is the research variable in this study.

DEMOGRAPHIC VARIABLE:-
Some common demographic variables are age, gender, marital status, religion, educational status, occupation, type of family, area of residence, family history of tuberculosis,

SAMPLING CRITERIA:-
Inclusion Criteria: - Patients who are diagnosed as suffering from tuberculosis and admitted in chest and TB Unit, Government Hospital, Sasaram, Rohtas-District, Bihar. Patients who can read, write, speak and understand Hindi language. Patients who are willing to participate in the study.
Exclusion criteria: - Patients who cannot follow the instructions. Patients who are not available during the period of data collection.

The tool consists of two sections.
SECTION-A: - It consists of demographic data such as age, gender, occupation, residence area, religion, type of family.
SECTION-B: - It consists of five point rating scale to assess the level of anxiety among the tuberculosis patient admitted in Government Hospital, Sasaram, Rohtas-District, Bihar.

Totally it consists of 15 items. The maximum score is 75 & minimum score is 15.

Score 1-25 indicates mild anxiety. Score 26-50 indicates moderate anxiety. Score 51-75 indicates severe anxiety.

LEVEL OF ANXIETY SCORING

| Mild anxiety | 1 – 25 |
| Moderate anxiety | 26 – 50 |
| Severe anxiety | 51 - 75 |

VALIDITY OF TOOL:-
Content validity was done in consultation with the research committee of the college.

METHODS OF DATA COLLECTION:-
Demographic data were collected using a structured base line perform prepared by investigator. Anxiety levels of tuberculosis patient were assessed by the five point rating scale.

DATACOLLECTION PROCEDURE:-
The data collection was schedule from 18 to 30 in the month of April 2016. Before the data collection the investigator obtained the formal permission from the Chief Medical Superintendent to conduct the study. Before the data collection the investigator obtained the formal permission from the Chief medical superintendent to conduct the study in Government Hospital, Sasaram, Rohtas-District, Bihar. Consent from patient is obtained to conduct the study.

ANALYSIS AND INTERPRETATION:-
Organization and presentation of data: - The data analysis was done by the descriptive and inferential statistics. The analysis was done based on the objectives. The demographic data would we analyzed in terms of descriptive statistics. The data analysis was as follows. Organize data in master sheet or computer: Personal data would be analyzed in terms of frequencies an percentage. Relationship between the variable and association was analyzed on the inferential statistics.

SECTION – A-

TABLE 1: - Distribution of tuberculosis patients according to their demographic variables. (n=30)

| S. No | Demographic Variable | Frequency | Percentage |
|-------|----------------------|-----------|------------|
| 1. AGE IN YEAR | | | |
| A 10 - 15 Year | 10 | 33.3 |
| B 16 - 20 Year | 20 | 66.7 |
| C 21 - 25 Year | 10 | 33.3 |
| D 26 - More | 10 | 33.3 |
| 2. GENDAR | | | |
| A Male | 18 | 60 |
| B Female | 12 | 40 |
| 3. MARITAL STATUS | | | |
| A Married | 26 | 86.7 |
| B Unmarried | 4 | 13.3 |
| C Separated | 1 | 3.3 |
| D Widows / Widower | 1 | 3.3 |
| 4. RELIGION | | | |
| A Hindu | 28 | 93.3 |
| B Muslims | 2 | 6.7 |
| C Christian | 1 | 3.3 |
| D Other | 1 | 3.3 |
| 5. OCCUPATION | | | |
| A Private job | 15 | 50 |
| B Government job | 15 | 50 |
| C Coolie & Agriculture | 15 | 50 |
| D Unemployed | 15 | 50 |
| 6. EDUCATIONAL STATUS | | | |
| A Primary education | 21 | 70 |
| B Intermediate | 9 | 30 |
| C Graduate | 16 | 53.3 |
| 7. TYPE OF FAMILY | | | |
| A Small family | 14 | 46.7 |
| B Extended family | 16 | 53.3 |
| C Slums | 16 | 53.3 |
| 9. FAMILY HISTORY | | | |
| A Maternal side | 2 | 6.7 |
This section deals with the association between the demographic variables and anxiety level score of subjects to assess the level of anxiety among tuberculosis patients.

**Fisher exact Z test** was used to find out association between the level of anxiety & demographic variables such as age in year, gender, marital status, religion, occupation, educational status, type of family, area of residence, family history.

### S. No | Demographic Variable | Z | Inference
--- | --- | --- | ---
1. | AGE IN YEAR | 4.86 | Significant P<4.86 at 0.05 level
A | 10 - 15 Year | | |
B | 16 - 20 Year | | |
C | 21 - 25 Year | | |
D | 26 - More | | |
2. | GENDER | 6.67 | significant P<6.67 at 0.05 level
A | Male | | |
B | Female | | |
3. | MARITAL STATUS | 3.36 | significant P<3.36 at 0.05 level
A | Married | | |
B | Unmarried | | |
C | Separated | | |
D | Widows | | |
4. | RELIGION | 3.44 | significant P<3.44 at 0.05 level
A | Hindu | | |
B | Muslims | | |
C | Christian | | |
D | Other | | |
5. | OCCUPATION | 0.78 | Not significant P>0.78 at 0.05 level
A | Privet job | | |
B | Government job | | |
C | Coolie & Agriculture | | |
D | Unemployed | | |
6. | EDUCATIONAL STATUS | 11.11 | significant P<11.11 at 0.05 level
A | Primary education | | |
B | Intermediate | | |
C | Graduate | | |
7. | TYPE OF FAMILY | 1.08 | Not significant P>1.08 at 0.05 level
A | Small family | | |
B | Extended family | | |
8. | AREA OF RESIDENCE | 15 | significant P<15 at 0.05 level
A | Rural | | |
B | Urban | | |
C | Slums | | |
9. | FAMILY HISTORY | 0.26 | Not significant P>0.26 at 0.05 level
A | Maternal side | | |
B | Paternal side | | |
C | Other | | |

Z= Fisher exact z test.

Table 2: Shows that there is significant association among the demographic variables & level of anxiety as like Age in year, Gender, Marital status, Religion, Educational status and area of residence with the Level of Anxiety at 0.05 level of significant.

**Major finding of the study:-**

1. **Demographic Variables:**
   - Majority of Tuberculosis patients according to their age reveals that 66.7% were in the age group of 26 years or more and 33.3% were in the age group of 21-25 year.
   - Majority of Tuberculosis patients according to their sex reveals that 60% were male and 40% were female.
   - Majority of Tuberculosis patients according to their marital status reveals that 86.7% were married and 13.3% were unmarried.
   - Majority of Tuberculosis patients according to their religion reveals that 93.3% were Hindu and 6.7% were Muslims.
   - Majority of Tuberculosis patients according to their occupational status reveals that 50% were doing private job and 50% were unemployed.
   - Majority of Tuberculosis patients according to their educational status reveals that 70% were educated up to primary level and 30% completed intermediate.
   - Majority of Tuberculosis patients according to their demographic variables like age, gender, marital status, religion, education status and area of residence with level of anxiety. Occupational status, type of family, family history was not associated with level of anxiety. There was high significant association between Age, gender, marital status, religion, educational status and area of residence with level of anxiety. There was high significant association between age and level of anxiety as the calculated value is higher than the able value at 0.05 level which is 4.86. There was high significant association between gender and level of anxiety as the calculated value is higher than table value at 0.05 which is 6.67. There was high significant association between marital status and level of anxiety as the calculate value is higher than the able value at 0.05 which is 3.36. There was high significant associated between area of residence and level of anxiety as the calculate value is higher than the able value at 0.05 interval which is 11.11. There was high significant associated between area of residence, family history and level of anxiety as the calculated value is higher than the able value at 0.05 level.

2. **Distribution of sample according to their level of anxiety:**
   - Majority of tuberculosis patients has moderate level of anxiety 66.7% and severe level of anxiety 33.3%.

3. **To association the sample of demographic variable with level of anxiety:**
   - Out of 30 samples, there is significant association among the demographic variables like age, gender, marital status, religion, education status and area of residence with level of anxiety.
CONCLUSION:-
Anxiety is a serious mental illness that is characterized by distress, fear which can lead to increase risk of clinical depression. Majority of tuberculosis patients (66.7%) has moderate level of anxiety and (33.3%) severe level of anxiety. There is association between the demographic variables likes area of residence & educational status with level of anxiety. Anxiety become a serious health threat that for tuberculosis patient by predisposing them to and increase risk of clinical depression. There is need of awareness among tuberculosis patients in rural area and urban area. This study suggested that medical professionals had focused on promoting knowledge by giving health education regarding prevention of anxiety among the tuberculosis patients.

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