ABSTRACT

Background
The one of the rising issues of developing countries is tuberculosis. In this study significant factors that increase or decrease the risk of tuberculosis patients in the Pakistani population are obtained. The objectives of the study were to investigate the factors which were influencing on the social life of tuberculosis patients by using the logistic regression model. The current study was hospital based case control study of 268 people with 100 were the tuberculosis patients and 100 were the healthy people. A study was conducted from 29th May 2013 to 15th September 2013.

Material
Data were collected through pre-defined questions based interviews and questionnaire was developed by using SF – 36 forum. Information was collected from the patients who were present at that time in the tuberculosis ward of Gulab Devi Hospital, Lahore for case group and from the healthy people in the control group.

Methods
Analysis was done by using SPSS (Statistical Package for Social Sciences) version 19 in four sections; descriptive, association of risk factors, Independent samples tests and model building. In descriptive section, frequency, percentages and graphical representation of all categories of risk factors and tuberculosis for both tuberculosis patients as well as healthy peoples were conducted. In analytical section, association of risk factors with tuberculosis patients was tested by the Pearson chi-square test at the 5 % level of significance. Independent samples tests were used for checking whether the difference between means of risk factors for both case and control group are significant. Model building was done by using logistic regression technique
was used to predict the probability of occurrence of tuberculosis in the presence of any significant risk factors.

Results

Descriptive

In descriptive section, it is found that males were more than females with 50.7% of tuberculosis patients. In a quantitative assessment of age group, it was found that the 38 – 40 years old of the age of patients have the highest rate of tuberculosis. In qualitative analysis by using a bar chart, it is found that the majority of the tuberculosis patients were married, unemployed and illiterate. It is also found that the majority of the tuberculosis patients was living in the same house with tuberculosis patients. The majority of patients whose did not participate in different activities, climb the stairs, bend daily and walk daily. Most of the tuberculosis patients were carried the groceries. Most of the tuberculosis patients felt moderate pain in the body. Most of the tuberculosis patients did not have energy and most of the tuberculosis patients felt tiredness in most of the time. Most of the tuberculosis patients spent the least of the time with their relative members.

Association Analysis

It is found from the association analysis that there is association between factors such as Marital Status, Employment Status, Education Status, Have you early contact with tuberculosis patient?, Do you live with the tuberculosis patients in the same house?, Weight Loss, Weakness, Fever, Hepatitis, Lose of appetite, The time in spending the work which you detect, Feeling any difficulty in doing the activities, Do you participate in different activities?, Do you push the table or vacuum cleaner?, Do you carry the grocery?, Do you climb the several stairs?, Do you climb one stair?, Do you bend daily?, Do you walk daily?, Do you feel pain in the body?, Do you think that you are weak person as compare to healthy people?, Are you healthy person?, Are you weak person?, Time in
which you have a good of force Time in which you have exhausted, Time in which you spend with your family members and friends, Feeling worried during the disease, Feeling calm during the disease and Feeling happiness during the disease and the tuberculosis disease.

**Independent Samples Test**

The difference between means for weight and body mass index for both case and control group are significant by applying the two independent sample t-test. The difference between the means for age, height, income of the head, physical health and psychological health for both case and control group are significant by applying the Mann – Whitney U test.

**Model Building**

It is found from logistic regression model, Age, Gender, Employment Status, Physical Health, Psychological Health, Weight and Living in the same house with the tuberculosis patients are significant with log-odds of tuberculosis patients relative to healthy people.

**Conclusion**

Tuberculosis is becoming an important public health issue with high incidence and mortality rates. This study depicts that the physical health and psychological health played a significant role in the social life of tuberculosis patients.