Frequency and Type of Addiction Among Tuberculosis Patients

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Abstract

Background: Tuberculosis is a major health problem and addiction to either tobacco, drugs or both are considered as major risk factors for the spread of disease.

Objectives: To determine the frequency and type of tobacco and other drug addictions in patients suffering from any type of tuberculosis.

Study type, settings and duration: Cross-sectional, descriptive study done by PMRC TB research center, at Institute of Chest Medicine; King Edward Medical University/Mayo Hospital Lahore from March 2012 to July 2012.

Patients and Methods: All patients confirmed with Mycobacterium tuberculosis infection, either pulmonary or extra pulmonary, were included in the study. A semi structured questionnaire was used to record the information relating to personal profile, microbiological data and the information relating to the drug and tobacco addiction.

Results: A total of 202 patients were selected out of whom 110 (54.5%) had pulmonary tuberculosis, 91 (45%) extra pulmonary tuberculosis and 1 (0.5%) had both pulmonary and extra pulmonary tuberculosis. Among 202 cases, 40 (19.8%) were addicted to tobacco (35 males, 5 females) and 5 were drug addicts (4 males 1 female) while 8 (all males) were both tobacco and drug addicts. After tobacco addiction, cocaine and alcohol were the most common addictions in these tuberculosis patients.

Conclusion: Almost 20% patients with tuberculosis are addicted to tobacco or drugs.

Key words: Tuberculosis, pulmonary TB, extrapulmonary TB, addiction.

Introduction

Tuberculosis (TB) is a contagious disease caused by Mycobacterium tuberculosis which has infected approximately one-third of the world’s population. In 1993 World Health Organization declared tuberculosis as a global emergency and the year 2000 give an estimated figure of 8.5 million cases of pulmonary tuberculosis including 3.5 million sputum positive cases with 1.9 million deaths.

Drug addiction is the use of Drugs in ways, which are not medically approved because they cause strong feeling of euphoria or they alter perception of the user leading to physical and psychological dependence. Drug addiction in tuberculosis can lead to not only the spread of tuberculosis but also of other diseases due to their immune compromised status. In Pakistan it is estimated that about 5 million drug addicts are present with more than 50% being youth who are playing a major role in the spread of infectious disease like tuberculosis.

Worldwide it has been estimated that nearly 1.25 billion people use tobacco and half of them die due to its use. Almost 5.4 million deaths occur annually from tobacco-related diseases and this shall rise to 8.3 million by 2030. A recent survey from Pakistan reported that 33% men and 4.7% women use tobacco daily. Tobacco addiction is closely linked with tuberculosis and poor treatment compliance leading to high mortality rate.

Tobacco use is common in Pakistan and is consumed either as cigarette or cigar or “Bidi” (Tobacco rolled in dry leaves), "Huqqa" (Hubble - Bubble), and "Sheesha" which is an upcoming trend in higher social class. It is also consumed as smokeless tobacco in the form of tobacco leaf in paan, chalia and as mouth freshener. The aim of this study was to find out the frequency and type of addiction among the patients suffering from active tuberculosis.

Patients and Methods

This cross-sectional, descriptive study was carried out by PMRC TB research center at the Institute of Chest Medicine; King Edward medical university/Mayo hospital Lahore from March 2012 to July 2012.

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TB suspects aged 15 and above having symptoms of cough, fever for more than three weeks were initially examined at TB out-patient clinic where 250 to 300 patients visit daily. Those with the suspicion of tuberculosis, either pulmonary or extra pulmonary were referred to PMRC TB Research Center for sputum smear microscopy for acid fast bacilli (AFB) by ZN staining method. Those found to be smear positive were registered in the Institute of Chest Medicine for the treatment of tuberculosis. All positive patients were interviewed in detail using a semi-structured questionnaire gathering information on patient profile, microbiological data and the use of drugs and tobacco.

Results

A total of 202 patients had confirmed Mycobacterium tuberculosis infection, either pulmonary or extra pulmonary. Their mean age was 31-years. In males the minimum age was 15 years and the maximum 85 years while, in females it was 13 to 79 years. Seventy males and 40 females had pulmonary tuberculosis, while, 45 males and 46 females had extra pulmonary tuberculosis and 1 male had both pulmonary and extra pulmonary tuberculosis.

Of the 202 cases, 93 were smear positive and 109 (54%) smear negative (extra pulmonary cases). All these cases were clinically and radiologically evaluated and confirmed for TB.

Among 202 cases, 35(30.2%) males and 5(5.8%) females were addicted to tobacco, 4(3.4%) males were drug addicts and only 1(1.2%) female was drug addict. Eight (6.9%) males were addicted to both tobacco and drugs. Of the tobacco addiction 43(37.1%) males and 5(5.9%) females used cigarettes, 2(1.7%) males used sheesha and 7(6.0%) males and 2(2.4%) females used huqqa. Of the drug addiction 6(5.2%) males used cocaine 3(2.6%) heroin and 2(1.7%) opium. Alcohol addiction was seen in 7(6.0%) males and 1(1.2%) female.

Discussion

The present study showed 30% males and 5.8% females were addicted to tobacco, 3.4% males and 1% females were addicted to drugs while 7% males were addicted to both tobacco and drugs. Gender difference in tuberculosis with disease being more prevalent in males has been reported and is thought to be due to either under diagnosis or underreporting of tuberculosis in females. In the present study, the male-to-female ratio of tuberculosis was 1.2:1 which, is low as compared to 2.1:1 and 1.5:1 reported in previous studies. Worldwide nearly 1.25 billion people use tobacco regularly and almost half of them will eventually die from it. There are 5.4 million deaths annually from tobacco-related diseases and this is projected to rise to 8.3 million by 2030. The prevalence of smoking among patients with TB is generally high and the development of tuberculosis due to tobacco use is 54.2%. In the present study only 19.8% cases who had tuberculosis were addicted to tobacco but these figures are under reported as this was a hospital based study and tuberculosis being a disease associated with stigma many patients do not turn for diagnosis or once diagnosed do not come back for treatment.

Drug addicts who later become immunocompromised suffer from different infections and malnutrition, resulting in increased risk for TB infection and rapid progression to active disease. In the present study 6.5% cases were drug addicts as compared to 64% reported in another study from Rawalpindi. Heroin addiction was low i.e.1.5% as compared to 11% reported in another study while, cocaine use was 3% which is similar to 2.2% reported in another study. These variations could be due to different study populations and different objectives of the studies.

The health care providers need to be sensitized to ask addictions from the patients suffering from tuberculosis and also try to prevent them from their use either through counseling or sending to specialists.

References


