

Prevalence of Tuberculosis in Tehsil Matta Swat Khyber Pakhtunkhwa

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Abstract:

Tuberculosis is the leading cause of mortality worldwide. The current study was designed to evaluate the proportion of tuberculosis in Tehsil Matta. Total numbers of 378 patients were investigated in the period of September to December 2013. The disease burden was recorded high in females that was 213 (56.34%), than males 165 (43.65%). The high collection was done in the month of September (28.59%). It was concluded that tuberculosis was prevalent in the area.

Key words: Tuberculosis, Prevalence, Disease burden, Matta, Swat.

Introduction

TB is a major health problem worldwide with mortality ranging from 1.6 to 2.2 million lives annually. The situation had become worst due to increase in the incidence of drug resistant tuberculosis (Aftab et al. 2009).

Tuberculosis remains a main health problem affecting about a third of the world population in spite of a number of preventive and control measures taken in the past few decades. It is accountable for an approximately 8.8 million cases and 1.4

million deaths worldwide (WHO 2009; Hargreaves et al. 2010).

According to survey it is expected that Africa contributes about 29% and 34% of all tuberculosis related morbidity and mortality to the worldwide load. In Ghana, tuberculosis remains a main reason of preventable adult morbidity and mortality (Ahorlu et al. 2013).

More than any other single infectious agent it is believed that tuberculosis is responsible for more adults deaths each year (WHO 2009). Tuberculosis occurs at any stage of life, to any age group and can affect almost all organs of the body (Fanning 1999).

Tuberculosis being one of the world's leading infectious diseases had caused 8.7 million incident cases and 1.4 million deaths in 2010 approximately (WHO 2012).

The major health problem and an important unnecessary risk for premature death is the use of tobacco. Relations between tobacco smoking and TB had been shown in wide research (Bates et al. 2007; Lin et al. 2007; Slama et al. 2007; Van Zyl Smit et al. 2010), and increased rate of death has been identified among smokers due to tuberculosis (Reed et al. 2013).

The problem of tuberculosis had become further complicated by the rapid spread of human immunodeficiency virus (HIV) and the appearance of drug resistance. HIV play key role in increasing the incidence of tuberculosis as it makes the diagnosis of tuberculosis difficult (Narain et al. 1992; Raviglione et al. 1992).

Pakistan ranks sixth among countries with a high burden of tuberculosis. In Pakistan tuberculosis is prevalent in 420,000 and incidence is 231 per 100,000 population (WHO 2010) Pakistan is among the 27 countries with high burden of MDR TB (WHO 2010). According to a 2008 there were approximately 15000 MDR TB patients in Pakistan (WHO 2010).

To the best of our knowledge not many studies have

been conducted on assessing public awareness of tuberculosis in population setting in Pakistan (Mushtaq et al. 2011).

Current study was carried out to evaluate the epidemiology, sex wise distribution and burden of disease in Tehsil Matta District Swat, Khyber Pakhtunkhwa Pakistan,

Methods and Materials

A descriptive study was conducted in the period of April to December 2013. Total 378 of patients were investigated in the study period. Data was collected through proforma containing the whole information about the patients, i.e gender, age, address, previous treatment and current treatment. The analysis of data was done age wise, sex wise and month wise.

Results and Discussion

Total 378 patients were investigated out of which 213 (56.34%) were females and 165 (43.65%) were males. The highest infection rate was found in the age of 31-40 years that was 173 (45.46%). According to (Ayaz et al. 2012) the infection rate of TB was high in age of 10-20 years that was (68.96%), (35.29%) infection was recorded in age from 21-40 years and the lowest infection rate was recorded in more than 40 years of age that was (15.06%). Similarly (Ahmad et al. 2013) reported the maximum numbers of patients in age of 15-64 that was 82.72. In our study the highest infection rate was found in the age of 31-40 years that was 173 (45.46%). The details are shown in table 1.1.

Age	Frequency	Percentage
1- 10 years	22	5.82 %
11-20 years	41	10.84 %
21-30 years	54	14.28 %
31- 40 years	173	45.46 %
41- 50 years	61	16.13 %

51- 60 years	27	7.14 %
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Table 1.1: Age wise distribution of patients (n= 378)

According to (Ayaz et al. 2012) high incidence of tuberculosis was recorded in female that was (16/78) 33.33 % than male that was (23/75) 30.66%. According to (Ahmad et al. 2013) ratio of tuberculosis was higher in female as that of male population and the recorded ratio of amount was (60/110) 54.55% and (50/110) 45.45% respectively. According to (Ullah et al. 2008) the numbers of male patients were 176 and female patients were 349. According to (Akhtar et al. 2014) the ratio of male was 137(44.19%) and female was 173 (55.80%). In our study it was found that infection was high in females than males. The details are shown in table 1.2.

Age	Male	Female
1- 10 years	10	12
11-20 years	16	24
21-30 years	24	30
31- 40 years	77	96
41- 50 years	27	34
51- 60 years	11	17
Total	165	213

Table 1.2: Sex wise distribution of patients (n=378)

A high prevalence 17(37.77%) was recorded in the month of July, followed by May 18 (34.61%) and June 14 (25%) of 2010 (Ayaz et al. 2012). In our study the high infection was recorded in the month of September (28.59%), followed by October (24.72%), November (23.45%) and lowest infection was found in month of December (23%). Month wise distribution of tuberculosis is shown in figure 1.3.

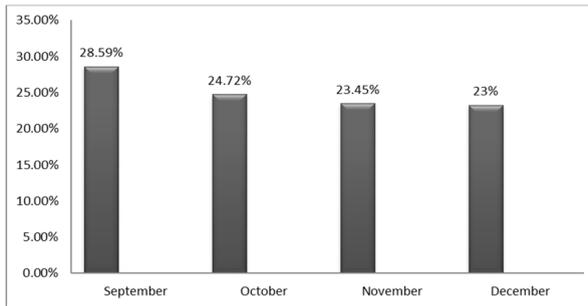


Figure 1.3: Month wise distribution of Tuberculosis

Conclusion

This survey shows that the people are unaware about tuberculosis in many aspects i.e. symptoms, diagnosis, treatment and transmission. Government has to educate people through media, seminars etc. The TB awareness programs should be initiated in order to aware the people about its signs and symptoms, transmission, treatment etc.

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