

Epidemiological Characteristics of Tuberculosis Patients Attending to Port Sudan Teaching Hospital

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Abstract:

A study was carried out to investigate epidemiological characteristics of tuberculosis patients attending to Port Sudan Teaching Hospital in the eastern Sudan. Some data were collected by reviewing records (132) of patients in the Hospital and other data by using questionnaire. The study illustrated that, infected males were 83(62.9%), 41(31%) were more than 40 years old, majority of patients were illiterate 74(56%), those who were live in one room were 99(75%) and most of patients were not aware with tuberculosis. Tuberculosis was more prevalent among males, elderly people and illiterates. Overcrowding and lack of awareness may increase the prevalence of the disease.

Key words: Tuberculosis, Sudan, epidemiological, Patients

Introduction

Tuberculosis is a social disease the social factors include a number of non-medical factors such as poor housing, overcrowding, large families, lack of education malnutrition, smoking habits, poverty etc (Gupta et al, 2002). Tuberculosis is a major health problem in developing countries. During 2008 there were 8.9 – 9.9 million reported tuberculosis cases all over

the world, most of them in Africa and Asia (Tajeldin and Abdel Aziem, 2012). The international tuberculosis situation is complicated by the growing impression that tuberculosis is no longer a major public health problem (Chakraborty, 2003). In most African countries, consumption of unpasteurized milk is a regular practice, leading to considerable risk of zoonotic infection with *Mycobacterium bovis* and other *mycobacteria* (Ayman et al, 2014). Tuberculosis (TB) is a major cause of morbidity and mortality in Sudan and has place and time implications (Samir, 2011). Sudan has high burden of tuberculosis (TB) with a prevalence of 209 cases per 100,000 of the population and 50,000 incident cases during 2009 (Ghada et al, 2011).

Materials and Methods

The study was conducted in Port Sudan Teaching Hospitals, which is a big hospital. It serves a large catchment area in eastern Sudan where the disease is more frequent.

The relevant data in this study were collected by reviewing records of patients and by using questionnaire that directed to patients and their relatives.

Results

In the following table infected males were 83(62.9%), 41(31%) were more than 40 years old, majority of patients were illiterate 74(56%), those who were live in one room were 99(75%) and most of patients were not aware with tuberculosis.

Characteristics of Tuberculosis Patients Attending to Port Sudan Teaching Hospital (n=132)

Gender	No	%
Male	83	62.9
Female	49	37.1
Age by years		
<10	21	16

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10 – 20	20	15
21 – 30	29	22
31 – 40	21	16
>40	41	31
Educational level		
Illiterate	74	56
Basic	40	30.3
Secondary	17	12.9
University	1	0.8
Number of house rooms		
One	99	75
Two	30	22.7
Three	3	2.3
Awareness with tuberculosis		
Aware	17	12.9
Not aware	115	87.1

Discussion

The present study revealed that males were more affected with tuberculosis. It might attributed to the males were more active outdoor and may exposed to different factors of tuberculosis infection, particularly, in Sudan where the cows are considered as a reservoir of mycobacterium tuberculosis the causative agent of the disease. The common practice is that males are usually being in contact with cows and other animals. However in other study carried out in Sudan, the incidence of tuberculosis among Sudanese patients was 46% cases in males and 54% in females (Ahmed et al, 2014).

The disease was spread more in age group more than 40 years and also among illiterate people due to the lack of knowledge about the mode of transmission and methods of prevention. Majority of participated patients were belong to families live in one room, they exposed to the risk of infection due to overcrowding.

Our result was supported by different studies e.g. Gupta et al 2002 found that the total percentage of male tubercular cases was 64% and only 36% cases were found among the

surveyed females, about 36% tuberculosis cases were in the higher age group, and also they found an association between overcrowding and infection with tuberculosis.

In a study conducted on status of tuberculosis in India, it was found that high prevalence of cases occurred in higher ages, males and illiterates (Chakraborty, 2003). The incidence rates generally rise with increasing age and are highest in people aged 70 years or over (Dilip et al, 2006).

Conclusion

Tuberculosis was more prevalent among males, elderly people and illiterates. Overcrowding and lack of awareness may increase the prevalence of the disease. The situation of tuberculosis in Sudan need more studies to detect cases and manage them.

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