Magnitude of Tuberculosis Cases Notified in a Municipality Epidemiological Profile, Risk Factors and Comorbities: A Temporal Analysis

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hhfcXiWh]cb. Tuberculosis remains among the most prevalent infectious diseases worldwide; Risk factors

underdeveloped or developing countries. Mortality drops significantly with the cessation of the act; in about 65% when compared to those who persist smokers, indicating that cessation of the addiction is a significant factor in the containment of morbidity and mortality.

Due to the fact that the active search for TB cases among populations at risk of illness is one of the pillars for reducing the incidence of the disease and given the scarcity of studies of this nature in the city of Campo Grande/MS, this research was aimed to describe the epidemiological profile of patients diagnosed with tuberculosis and estimate the incidence of comorbities and associated risk factors of all cases notified by its health services in the capital over a 6-year period.

Materials and Methods

This is a descriptive, retrospective, quantitative and cross-sectional study of secondary data. Data were obtained from the National System of Notifiable Diseases (SINAN), provided by the Health Department of Campo Grande, MS (SESAU/CG-MS) in the form of a database, coate Aalshd#8QukzdqbylhalNsmhMyonEHeaMr[3]. The sample combé(bM   D   D

Temporal Analysis. Epidemiol Sci 11:417.

The reporting units included health services from Primary/ Secondary Care, Hospital Network and Prison System [9]. The Primary Care Units notified 1245 cases (44.4%), followed by the Hospital Network, with 865 (30.8%), and the prison system, with 696 (24.8%) of the total cases (Table 2).

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Primary/secondary care		1245	44,4%
Tertiary care		865	30,8%
Prison system		696	24,8%
Total		2806	100%
BchY. N: number of cases, %: percentage of cases			

Table 2: Distribution of the number and percentage of TB cases diagnosed and notified according to the organization of the municipality's Health Services in the period 2014 to 2019.

Among the 2806 cases, 1984 (70.5%) had at least one comorbidity. Smoking was the most prevalent health problem, with 757 cases (27%), followed by the use of psychoactive substances, with 608 (21.7%), and alcoholism, with 582 of the study population (20.7%) [10]. The association between chemical dependency, alcoholism and TB occurred in 184 cases (6.5%) of the census, as the most prevalent association of three comorbidities. The second most common association was between alcoholism and users of psychoactive substances, followed by TB-HIV co-infection and substance abuse. Among the 582 alcoholics, 256 were users of psychoactive substances (44%). Among illicit drug users, 84 (13.8%) were HIV positive. The fourth most prevalent comorbidity was HIV/Aids co-infection, with 387 (13.8%) cases. The rapid HIV test was performed at the time of TB diagnosis for 2315 cases (82.5%). Diabetes was the lowest rated disease, with na association rate of 5, 4% (Table 3).

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	N	%	N	%
Smoking	757/2806	0.27%	666/757	88%
Alcoholism	582/2806	20,7%	436/582	79,1%
Psychoactive substances	608/2806	21,7%	548/608	90,1%
HIV/AIDS	356/2806	13,8%	209/387	54%
Total	2806	100%	757	100%

BchY. N: number of cases, %: percentage of cases

representative number of this disease is registered in prisons, corresponding to almost a third of the total number of notifications.

Discussion

Behavioral aspects present in the prison population also contribute to the higher risk of infection. Most inmates have a history of malnutrition and use of alcohol, unprotected sex, tobacco and other drugs, maintaining risky behavior even when incarcerated.

Most diagnoses occurred in Primary/Secondary Care. Primary care units are considered the gateway for patients with suspected TB, where preventive measures, health promotion and early diagnosis of respiratory symptoms, risk groups and their comorbidities are carried out, as well as treatment and monitoring of cases.

It was identified that one third of TB cases were diagnosed in hospitals, possibly in advanced stages or with signs of seriousness, either by TB itself or by associated diseases. This further indicates that the active search for cases by Primary Health Care (PHC) in the municipality does not reach the 80% goal recommended by the Ministry of Health for disease control in the country, which aims to inc€]ł

This low percentage observed in this survey may point to problems in managing the program and updating information on Sinan.

The data obtained in this study highlights a great incidence of smoking, alcohol consumption, HIV co-infection and the use of legal and illegal drugs among TB cases, reinforcing the disease as an important public health problem, aggravated by the comorbidities presented. The male gender, emerging as highly superior to the female, raises hypotheses about the epidemiology of the municipality and collective health actions for this population. The data obtained points out to the need of DOT assessment in the capital, given the alarming