

Incidence trend of tuberculosis between 2010-2021 and an epidemiological profile of tuberculosis cases in 2021 in São Vicente, Cabo Verde

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Tuberculosis still constitutes a public health problem today as it affects São Vicente island's population in Cabo Verde

BACKGROUND

Tuberculosis (TB) is an infectious disease caused by the bacteria *Mycobacterium Tuberculosis*, which if left untreated can lead to death [1]. In 2021, around 10.6 million people were infected worldwide, of which 23% of cases were reported in Africa [2]. In Cabo Verde, TB continues to represent an important public health problem [3,4]. The island of São Vicente has been one of the most affected in the country, where there are still many challenges in terms of identifying cases, starting early and rigorous pharmacological treatment of patients and measures aimed at protecting the people who live with the patient [5]. The aim of this study is to characterize the epidemiological profile of tuberculosis in 2021 in São Vicente Island and analyse the incidence trend of tuberculosis between 2010-2021.

METHODS

- An observational, descriptive study was carried out using data obtained from the Notifiable Diseases Surveillance System of the São Vicente Island.
- Following variables were selected and analysed: age, gender, residence, profession, bacilloscopy result, form of TB, origin of the cases, treatment implemented and outcomes, and the result of the HIV test.
- Statistical analysis was done using SPSS 28.0 and statistical significance level was considered when $p < 0.05$.

RESULTS

In total, 55 TB cases (incidence coefficient: 64.6/100.000) were reported in São Vicente in 2021, **figure 1**. The mean age was 38.7 ± 14.4 (range: 14-72) years. Most patients with TB were male (65.5%), living in Monte Sossego area (20.0%), and formally employed (45.5%). Almost half of the patients (45.5%) were diagnosed at Hospital Central Dr. Batista de Sousa and 81.8% were diagnosed by bacteriological criteria with positive bacilloscopy, **table 1**. The mean incidence rate between 2010 and 2021 was 64.5/100,000 population, with a non-statistically significant downward trend (APC: -2.97%; CI_{95%}: -6.61 to 0.48%; $p=0.082$), **figure 2**.

CONCLUSIONS

Despite a reduction seen over the last 10 years, this is not significant, and it is distant from the goal established by Agenda 2030 [6]. It demonstrates that there is still a need to improve policies related to TB prevention and health promotional.

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RESULTS CONTINUED

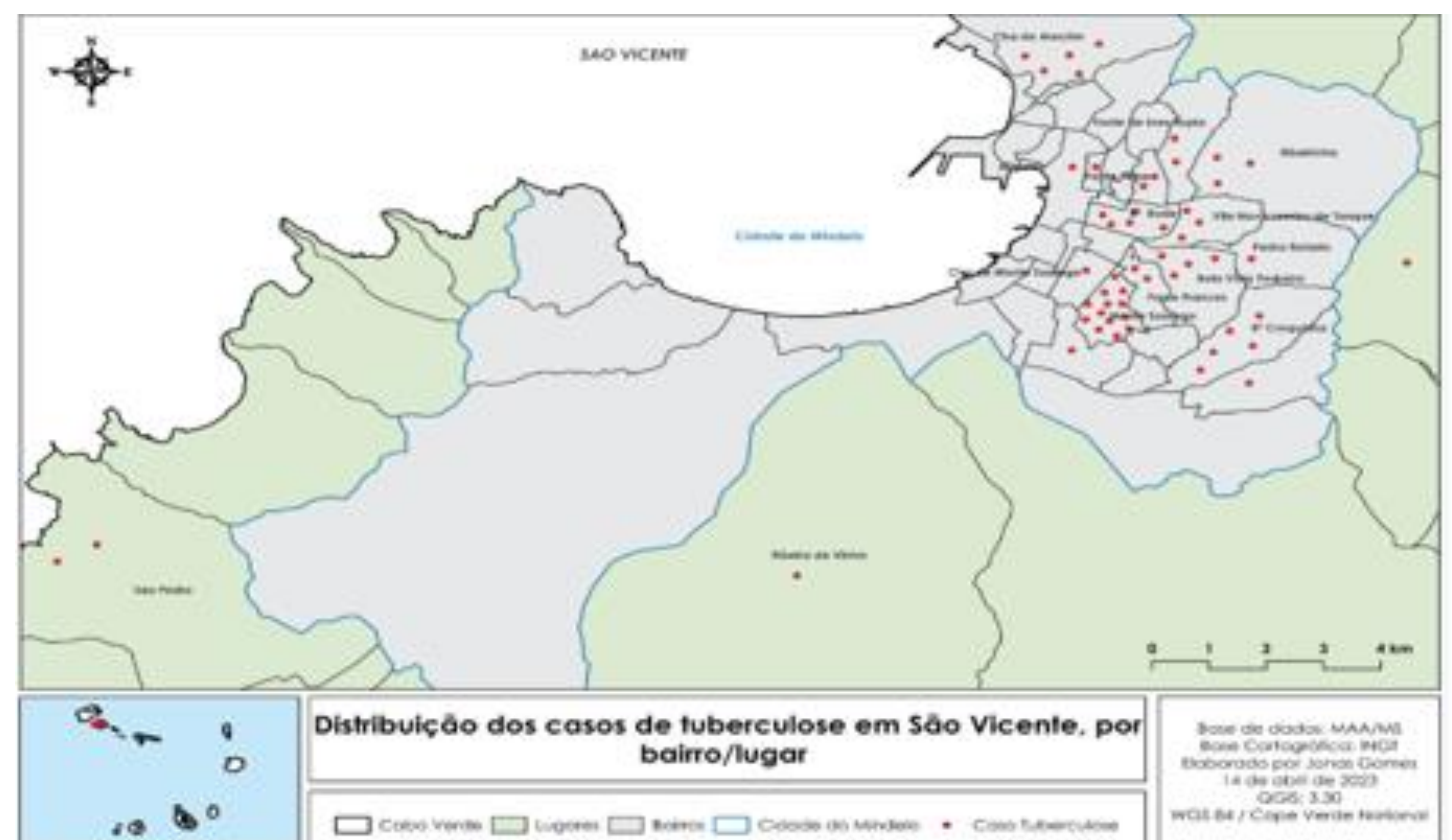


Figure 1: Spatial distribution by location of tuberculosis cases in 2021

Table 1: Clinical characteristics

Clinical characteristics	N (%)
Patient origin	
Hospital central Batista de Sousa	26 (46.3%)
Health centre	15 (27.3%)
Active search (home)	8 (14.5%)
Private clinics	6 (10.9%)
Diagnosis by Bacilloscopy	
Positive	45 (81.8%)
Negative	3 (5.5%)
Not registered	7 (12.7%)
Form of TB	
Pulmonary	52 (94.5%)
Extrapulmonary	2 (3.6%)
Both	1 (1.8%)
HIV test	
Positive	1 (1.8%)
Negative	53 (96.4%)
Not registered	1 (1.8%)

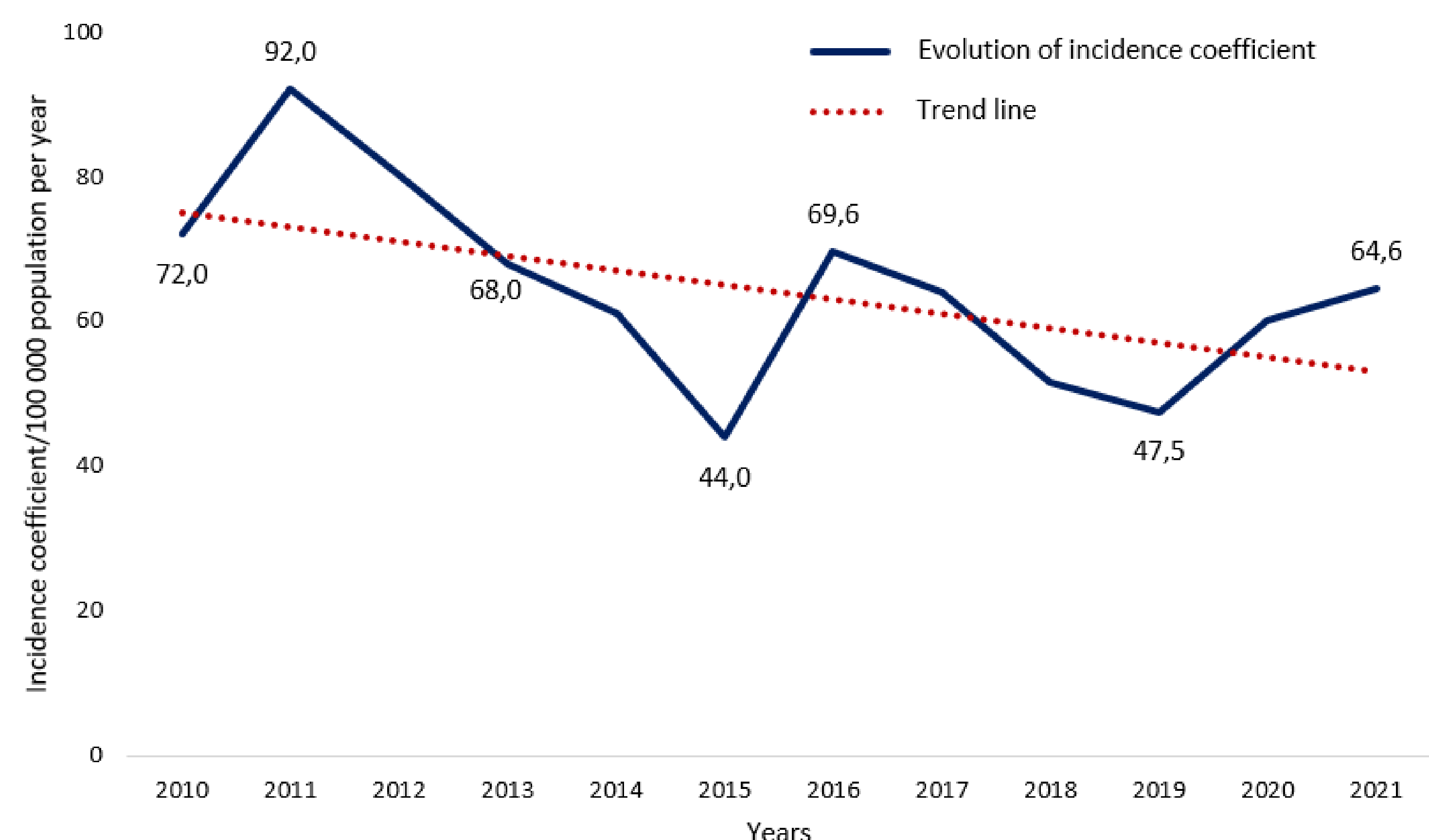


Figure 2: Evolution of the incidence coefficient in São Vicente between 2010 and 2021.