

**EPIDEMIOLOGICAL
PROFILE OF DEATHS
DUE TO COVID-19
RESIDENTS IN THE
MUNICIPALITY OF
PAULISTA**

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Abstract: COVID-19 is a respiratory infection that develops from asymptomatic and mild forms, to the most serious ones such as Severe Acute Respiratory Syndrome (SARS). In Brazil, in 2020, more than 7 million cases and about 190 thousand deaths were confirmed. In the same period, the State Department of Health of the state of Pernambuco confirmed more than 222,000 cases and 9,666 deaths, knowledge of mortality from covid-19 contributes to timely and adequate interventions. **Objective:** To describe the epidemiological profile of SARS deaths due to COVID-19, among residents of the city of Paulista in 2020. **Methodology** This is a descriptive cross-sectional study, which used secondary data for the year 2020 from the SARS Case Notification Electronic Form Database. The variables selected for the study allowed the description of the profile and the analysis of the consistency of the FormSUS SARS data, the cases of SARS deaths confirmed by COVID-19 through laboratory report, which had their place of residence in the city of Paulista. And duplicate records, notifications without reports and cases that evolved to clinical cure were excluded from the research. Data were processed and analyzed using the Microsoft Excel program, with their respective 95% confidence intervals (95%CI), and analyzed in the light of the relevant literature on the subject.

Keywords: Coronavirus, Epidemiology, Mortality.

INTRODUCTION

Since 2019, the world has suffered from the consequences of an emerging infectious disease, COVID-19. Declared a pandemic in March 2020 by the World Health Organization (WHO), the disease is caused by a new viral strain of a coronavirus, SARS-CoV-2.¹

COVID-19 is a respiratory infection that can develop from asymptomatic forms and flu syndromes (GS) with mild symptoms, to more serious conditions such as Severe Acute Respiratory Syndrome (SARS).²

For Duarte (2021) and Santos (2020), the high transmissibility of the virus associated with its main prevention and control measures, such as social distancing, hand hygiene, respiratory etiquette and vaccine, make the most socially vulnerable populations susceptible. and economically, bearing in mind that these people have precarious working, housing, basic sanitation and income conditions, in addition to the repercussions caused by unequal access to goods and services, including health services.^{3,4}

WHO data indicate that in the year 2020, approximately 82 million confirmed cases and almost 2 million deaths from COVID-19 were recorded worldwide. In Brazil, more than 7 million confirmed cases and about 195,000 deaths were reported in the same period, ranking 3rd in the world in terms of accumulated cases. The country was behind only the United States of America (32,167,970) and India with (21,077,410), according to data released by the WHO.

In the state of Pernambuco, according to the bulletin published by the State Department of Health (SES-PE), over the same period, more than 222,000 cases of COVID-19 were confirmed and 9,666 deaths were recorded. The state of Pernambuco, together with 4 other Brazilian states, São Paulo, Rio de Janeiro, Ceará and Amazonas, accounted for 81% of deaths in Brazil.^{5,6}

Due to the epidemiological scenario, the state, through Decree No. 48,833, of March 20, 2020, declared an abnormal situation, characterized as a “State of Public Calamity” at the state level due to the Public Health Emergency of International Importance (PHEIC) resulting from the new coronavirus.⁷

In turn, the municipality of Paulista, after identifying community transmission through surveillance and monitoring of the disease, declared a Public Health Emergency Situation and entered a mitigation phase aimed at preventing serious cases and possible deaths (Decree No. 2020).⁸

The first confirmed cases of the disease in the municipality were reported in March 2020 and since then, Paulista has accumulated a total of 9,737 confirmed cases, of which 705 have died. until June 8, 2021 (Inform CIEVS 01/2021).⁶

Surveillance of diseases caused by respiratory viruses is of great relevance to Public Health due to its epidemic nature, being an essential strategy for monitoring and controlling these etiological agents. are notified through the E-SUS platform, an online tool created by the Ministry of Health (MS) to record information on notifications of these cases by COVID-19 through the website <https://datasus.saude.gov.br/notifica>.

Cases of SARS hospitalized or due to death are notified in the Influenza Epidemiological Surveillance Information System (SIVEP - Influenza), a system created for the surveillance of these syndromes. Deaths that have a positive laboratory report for COVID-19 are, regardless of hospitalization, notified in SIVEP-Flu, in addition to registration in the Mortality Information System (SIM), following the recommendations of the Health Surveillance Guide, 2019.¹⁰

In addition to these systems mentioned above, another source of notification for cases of COVID-19 is through the electronic notification form, FormSUS. This form aims to collect, store in an organized way, generate reports and use data in other systems of public interest, in addition to having the ability to make information more agile and democratic, optimizing the sharing of data

of interest to health. This strategy is used by surveillance in the state of Pernambuco and in the municipality of Paulista, making access and decision-making more timely. Available at: <http://siteformsus.datasus.gov.br/FORMSUS/index.php/cievs>.¹¹

It is important to emphasize that, with the insertion of COVID-19 in the epidemiological scenario, surveillance requires a restructuring of the sector, in order to achieve all the new objectives proposed to strengthen the response to the pandemic. That said, the municipal Epidemiological Surveillance (EV), in addition to notifying, investigating and closing cases, develops an important work in the process of monitoring, investigating and analyzing data related to COVID-19.¹⁰

In addition, the VE is also primarily responsible for the active search for confirmed and/or suspected cases, with the aim of detecting new cases early, in addition to providing adequate guidance to the population on prevention and care against the virus, measures that favor the coping with the pandemic.^{2, 10}

RESULTS AND DISCUSSION

The sample is reported in Graph 1 and its distribution of deaths of confirmed cases is described in Table 1, highlighting the population aged between 61 and 80 years, with the highest mortality rate (50.51%) among the others and the predominant male gender in all age groups (68.86%), as well as the place of death being in the health service (98.55%).

The lethality rate among confirmed cases (30.78%) and discarded cases (13.77%) indicates a higher risk of dying from COVID-19 when compared to other flu diseases.

Although men and women are equally likely to contract the virus, males stand out among the rates of contamination and death,

following the national trend and that of other countries.

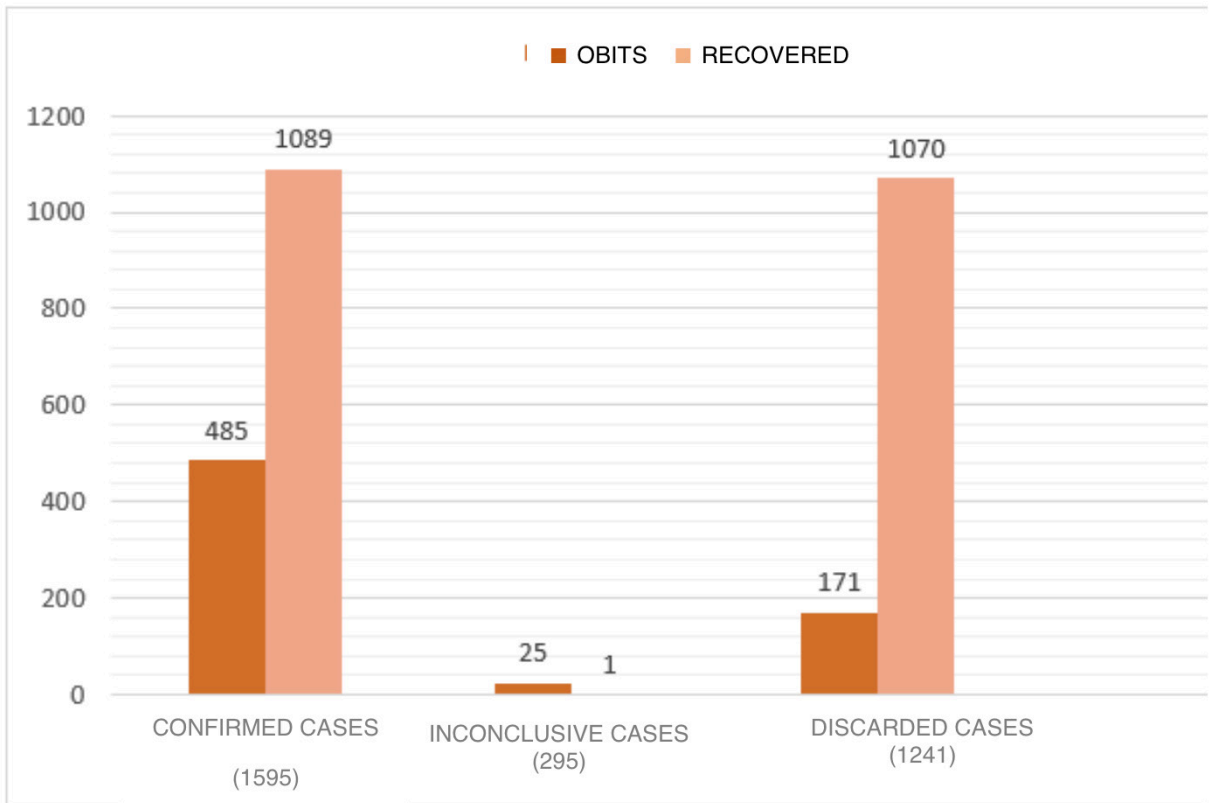
In addition, the number of deaths at home is insignificant, but it is worth mentioning that, in cases of death due to a highly transmissible disease, which often requires hospitalization for treatment, deaths that occur at home show lack of assistance, gaps in the health system and social assistance as well as the lack of timely and preventive care that must be.

CONCLUSION

The study sought to identify some aspects of the epidemiological profile of patients, residents of the municipality of Paulista, diagnosed with Covid-19, during the first year of the pandemic and compare them with data from the literature.

From the findings, it can be concluded that the behavior of the Covid-19 pandemic in the municipality was quite similar to that of the rest of the state.

The clinical condition considered mild was predominant among the confirmed cases. With very similar epidemiological characteristics (age, gender, symptoms and presence of comorbidities) with literature data. SARS cases and death, according to variables of age, gender, symptoms, comorbidities, also showed behavior similar to those found in the literature. It is noteworthy that for this group, symptoms such as fever, cough and dyspnea were reported more frequently and comorbidities such as heart disease, diabetes, obesity and lung disease, in addition to advanced age, were more frequent higher risk when compared to patients with mild disease.



AGE GROUP (Years)	TOTAL DEATHS (N)	GENDER FEMININE (N)	GENDER MASCULINE (N)	DEATHS AT HOME (N)	DEATHS IN A HEALTH CARE UNIT (N)
0-20	2	1	1	0	2
21-40	15	6	9	0	15
41-60	122	49	135	3	119
61-80	245	110	135	1	244
>80	101	47	54	3	98
TOTAL	485	213	334	7	478

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