



**VISITS BY ENDEMIC AGENTS DURING THE COVID-19 PANDEMIC
19 IN THE MUNICIPALITY OF SANTANA DO IPANEMA- AL: NEW HABITS AND
CHALLENGES**
*ISITS OF ENDEMIC AGENTS DURING THE COVID-19 PANDEMY IN THE
MUNICIPALITY AND SANTANA DO IPANEMA-AL: NEW HABITS AND CHALLENGES*

Submitted on: 11/16/2021

Approved on: 11/18/2021

v. 1, ed. 11, p. 01-13, nov. 2021

DOI: 10.51473/rcmos.v1i11.229

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Sebastião da Rocha França**Loane Márzia Lopes Costa****Summary**

The main focus of this study is to address the new ways and work habits of Endemic Disease Agents in the municipality of Santana do Ipanema, located in the Alagoas hinterland. The main objective of this work was to record the difficulties that endemic disease agents faced during visits during the Covid-19 pandemic. Addressing the visits of endemic disease agents during the covid-19 pandemic in the municipality of Santana do Ipanema-AL, is justified because it is a current issue, which involves public health, control and combat of endemic diseases. The present study consists of applied research, of an exploratory nature, with results treated in a qualitative and quantitative manner, bringing together a literature review based on academic productions and content published by specialists, to collect secondary data and surveys to support the theoretical framework, and a primary data survey that was carried out through a semi-structured questionnaire, prepared through the *Google Forms*, and made available to the target audience. With the collection of information throughout the research and analysis of the information, it was possible to conclude that during the Covid-19 pandemic, new challenges appeared during the routine and work of Endemic Disease Agents, changing daily habits and adhering to prevention measures against Covid-19, preserving your health and that of the residents of the homes visited.

Keywords: Endemic Disease Agent; Changes; Visits; Coronavirus**Abstract**

The focus of this study is to address the new forms and work habits of Endemic Agents in the municipality of Santana do Ipanema, located in the hinterland of Alagoano. The main objective of this study was to record the difficulties that agents of endemic diseases faced during visits during the covid-19 pandemic period. Addressing the visits of endemic agents during the covid-19 pandemic in the municipality and Santana do Ipanema-AL, it is justified because this is a current issue, which involves public health, control, and combat of endemic diseases. The present study consists of applied research, of an exploratory nature, with results treated in a qualitative and quantitative way, bringing together a literature review based on academic

productions and content published by experts, for secondary data collection and surveys to support the theoretical framework, and a survey of primary data that was done through a semistructured questionnaire, developed through Google Forms, and made available to the target audience. With the gathering of information throughout the research and analysis of the information, it was possible to conclude that during the Covid-19 pandemic, new challenges appeared during the routine and work of Endemic Agents, changing daily habits and adhering to prevention measures against Covid- 19, preserving their health and that of the residents of the homes visited.

Keywords:Endemic Agent; changes; Visits; Coronavirus

1. Introduction

The expression endemic has been used by humanity for many years along with the word epidemic, together they date back to historical moments in human health such as the black plague, cholera, tuberculosis and yellow fever, currently being dengue fever, visceral leishmaniasis and influenza , as well as measles and other re-emerging diseases, examples of infectious diseases that have been causing concern in public health (TOLEDO, 2006).

Traditionally, endemic diseases were classified as those that presented spatial variation among their epidemiological characteristics, that is, a peculiar spatial distribution associated with certain specific social or environmental processes. Likewise, diseases that varied over time were classified as epidemic, that is, they had a concentration of cases in specific periods, suggesting more or less abrupt changes in the epidemiological structure. (BARATA, 2000).

According to Evangelista (2019), over the years, arboviruses¹Over the years it has caused a significant number of deaths, and is present in several parts of the national territory. Dengue and other arboviruses such as Chikungunya and Zika are diseases caused by viruses from different families, but which have the same vector, mosquitoes of the genus *Aedes*, with *Aedes aegypti* being the most adapted to the urban environment. These diseases today constitute serious public health problems in Brazil and impose major social and health challenges in the territories where they are present (MOURA, 2012).

According to the Ministry of Health, activities to prevent and control arboviruses in Brazil, especially Dengue, have been based on the National Dengue Control Program (PNCD), prepared by the Ministry of Health in 2002, which incorporated the principles of integration of dengue control actions into primary care and, thus, counts

¹Arboviruses are diseases caused by arboviruses, which include dengue, Zika, Chikungunya and yellow fever viruses.

with two important actors for this construction, the agent to combat endemic diseases (ACE) and the community health agent (BRASIL, 2009).

ACEs are essential in the control of arboviruses along with community support, strengthening the PNCD's educational actions, with duties based on surveillance, prevention and control activities of endemic and infectious diseases and health promotion, based on carrying out surveillance actions for endemic diseases and their vectors, in addition to chemical control (chemical substances such as larvicide and/or insecticide), when necessary (ANDRADE; PEIXOTO; COELHO, 2020).

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According to Zara (2016), ACEs are responsible for promoting mechanical and chemical control of the vector, and their actions are based on detecting, destroying or adapting natural or artificial water reservoirs that can serve as deposits for Aedes eggs. Furthermore, ACE usually performs three types of control mechanisms: mechanical, biological and chemical. Furthermore, during the home visit, educational activities are promoted to ensure the permanent elimination of breeding sites by property owners, with the aim of interrupting disease transmission.

The Ministry of Health registered the first case of Covid-19 in the city of São Paulo on February 26, 2020. Several activities that involved direct contact between ACEs and other professionals with the community began to be implemented, with emphasis on the Social distancing and the use of PPE were adopted as one of the essential measures to reduce the spread of the virus throughout the national territory. The agent's role is now limited only to visiting the resident's home, observing precautionary measures (ANDRADE; PEIXOTO; COELHO, 2020).

Therefore, this research is justified because it is a current issue, which involves public health, control and combat of endemic diseases. Given the pandemic that spread quickly and the importance of social distancing was highlighted, some people refused to receive the endemic disease agent in their homes out of fear and concern about the spread of the virus. Thus, it is possible to note that without this control and inspection that agents carry out during visits to homes, it can directly or indirectly impact the public health of the municipality, potentially impacting the control of already controlled endemic diseases such as Dengue, Zika, Chikungunya, among others.

Discussing the difficulties that endemic agents had during home visits in the face of the Covid-19 pandemic is justified because it is a current issue, which involves public health, control and combat of endemic diseases. In the face of the pandemic and

It spread quickly and the importance of social distancing was highlighted, as a result of which some people refused to receive the endemic disease agent in their homes out of fear and concern about the spread of the virus. Thus, it is possible to note that without this control and inspection that agents carry out during visits to homes, it can directly or indirectly impact the public health of the municipality, potentially impacting the control of already controlled endemic diseases such as Dengue, Zika, Chikungunya, among others. Therefore, the present research aimed to record the difficulties that endemic disease agents faced during visits during the Covid-19 pandemic.

2 Theoretical foundation

COVID-19, caused by the new coronavirus named SARS-CoV-2, announced on December 31, 2019 in a Chinese province, created a feeling of instability and widespread fear in the world. The epidemiological situation was considered a pandemic, after the declaration of a Public Health Emergency of International Concern by the World Health Organization (WHO), in January 2020. (CRUZ MA 2020)

Transmission occurs through SARS-CoV-2 infection, from individual to individual through coughing, sneezing and interaction with other people or even when heavy droplets are eliminated by someone infected and fall onto surfaces. (FANG 2020)

The sustainability of this pandemic has as its determining and conditioning factors several economic, cultural, ecological, psychosocial and biological situations, being closely related to the characteristics of the etiological agent that spreads quickly among people due to its form of transmission. Diseases transmitted through direct contact are favored by precarious housing and sanitation conditions, as well as situations that encourage crowding. (MOURA 2012)

Informative Note No. 8/2020-CGARB/DEIDT/SVS/MS brings the Recommendations to Agents to Combat Endemic Diseases (ACE) to adapt surveillance and control actions for zoonoses in light of the current epidemiological situation regarding the Coronavirus (COVID-19), aiming to reduce the risk of transmission of this disease in the population. This standard recommends attention to the measures to be observed for activities carried out by ACE, including home visits, during the pandemic period.(MINISTRY OF HEALTH 2020).

3 Methods

The present study consists of applied research, of an exploratory nature, which according to Gil (2002, p.41): aims to provide greater familiarity with the problem, with a view to making it more explicit. It may involve bibliographical research or interviews with people experienced in the researched problem. It generally takes the form of bibliographical research and case study.

In this sense, the results were presented in a qualitative and quantitative way, with secondary data, bringing together the literature review based on academic productions and content published by experts, for secondary data collection and surveys to support the theoretical framework, and a survey of primary data that was done through a semi-structured questionnaire, prepared through the *Google Forms*, and made available to the target audience, those who are Endemic Disease Agents in the municipality of Santana do Ipanema located in the backlands of Alagoas, through a link via WhatsApp.

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3.1 Questionnaire guiding the research

1. What is your sex?

Female, male

2. How old are you?

Between 20 and 25 years old

Between 26 and 31 years old

Between 32 and 40 years old

Between 41 and 50 years old

More than 50 years old

3. How long have you worked as an endemic disease agent?

1 year

Between 2 and 5 years

More than 5 years

4. Has the Covid-19 pandemic brought any difficulties to your work routine?

Yes No

5. If yes, which one (or which ones)?

6. Have you received any training/guidance to adapt and respect the new preventive measures against Covid-19?

Yes No

7. If yes, what were the guidelines? describe them.

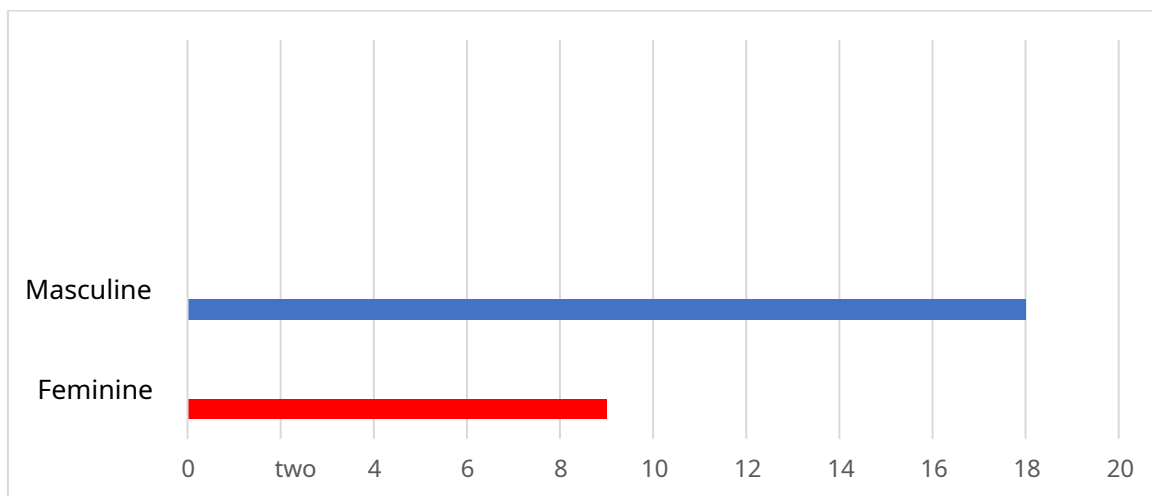
8. Was there any objection or fear on the part of the residents about welcoming you (you endemic disease agent) into their homes?

4 Results and discussion

27 Endemic Disease Agents from the municipality of Santana do Ipanema, Alagoas, who worked in the urban area of the city, participated in this research. The identity of the participants was not revealed, giving participants more security in answering the questions. Of the total survey audience, the majority were male, as shown in the graph below.

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Graph 1. Sex of research participants

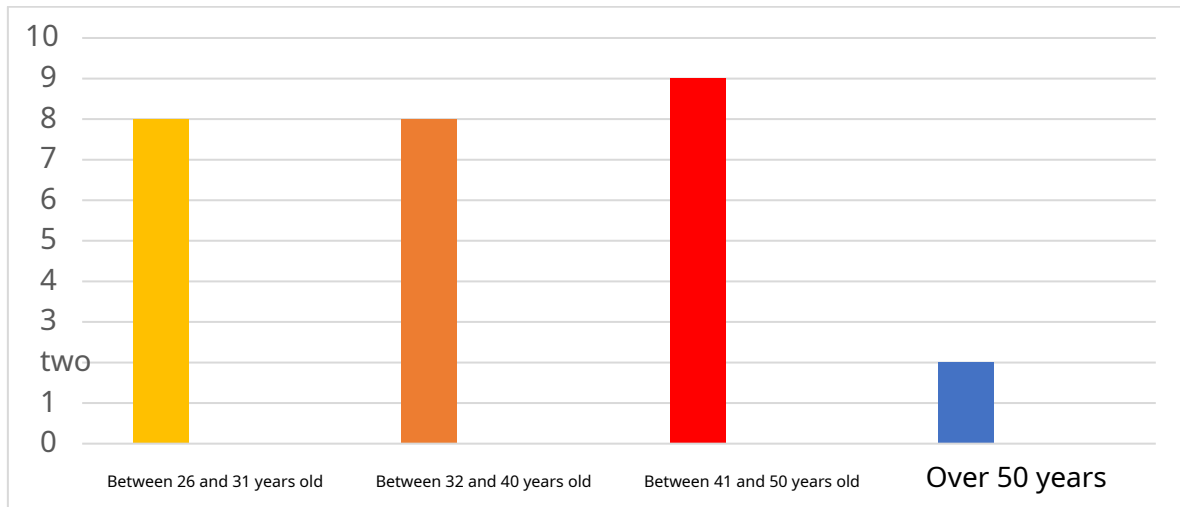


Source: Authors 2021

Of the sample public that participated in this research, 77% were male and 23% female. Regarding age, the majority indicated that they were between 41 and 50 years old, representing 36% of the total number of interviewees, however the margin of difference is considered low compared to the 30% who stated that they were between 32 and 40 years old, the same percentage is repeated in the participants who stated that they were between 26 and 31 years of age, which also reached a total of 30%. The lowest percentage, which was 4%, represents the public over 50 years old, as shown in graph 2.

In the works of Simas, Pinto (2017) and Moreira, Soares, Castro and Bispo Júnior (2019), report that studies with trial samples indicate that the average age of community agents is between 40 and 45 years old.

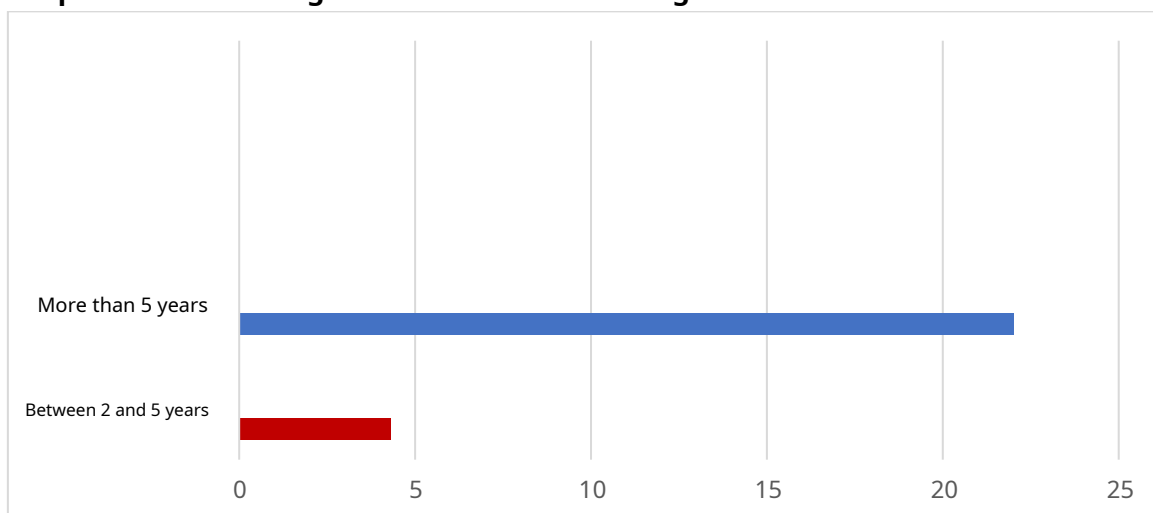
Graph 2. Age of research participants.



Source: Authors 2021

When asked about the length of time they have worked as a professional endemic disease agent, the majority of interviewees stated that they had been working in the area for more than 5 years, and a small percentage indicated that they had been working in the area for between 2 and 5 years, as is represented in the graph below.

Graph 3. Time working as an Endemic Disease Agent.

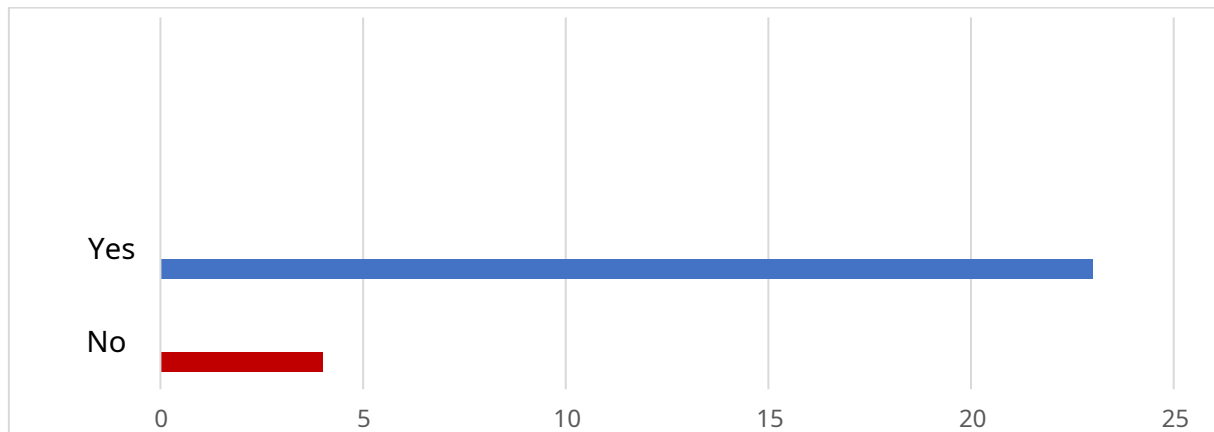


Source: Authors 2021

When asked whether the Covid-19 pandemic affected the performance of AEs in any way, in their work routine 89% said yes, after the start of the new pandemic

difficulties arose during his work routine. On the other hand, 11% confirmed that nothing had changed.

Graph 4. representative for the question: Did the Covid 19 pandemic affect your work routine?



Source: Authors 2021

The process of social isolation has caused some impacts on people's lives (ORNELL, SCHUCH & SORDI, 2020). It is important to consider that, in crisis and emergency situations, an increase in certain discomfort is expected with the changes experienced in social and work routines: changes in family routines, restrictions on travel, concerns about financial maintenance, intensification of work through remote work or difficulty in maintaining work activity, among other aspects (ALBERT, YOUNAS; SANA, 2020).

According to data resulting from the study by Almeida et al., (2020), it showed that among individuals who were working, 29.4% worked more than normal during the pandemic. Domestic work also underwent changes following the pandemic, with 61.7% of the population reporting an increase in the performance of such activities.

Still dealing with what may have been affected in the population's daily lives due to the pandemic, Afifi; Felix; Afifi, (2020), reports that the recent pandemic represents a great challenge for society as it is an extremely stressful event, considering disease prevention and containment measures, economic, political and social impacts, as well as the impact on mental health, taking into account the emotional, cognitive and behavioral changes characteristic of this period in the individual's daily life.

Among the main difficulties mentioned by the participants, some statements were listed below:

“It made it difficult for us to enter homes, making it impossible to carry out positive quality work.”

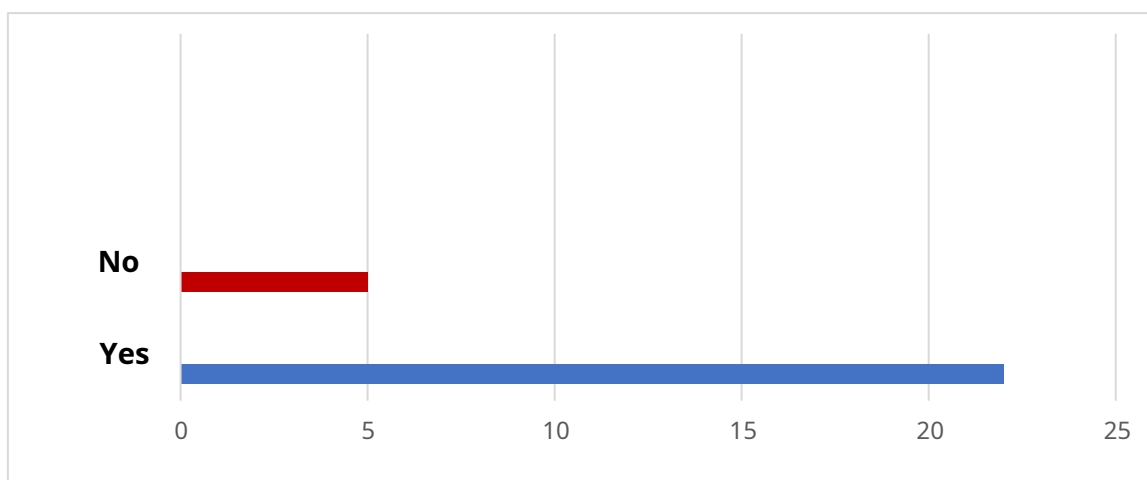
“Not being able to carry out internal visits in residences without an external passage, if anyone has seen had taken the vaccine, and especially where there were cases of people with suspected symptoms of Covid-19.”

“Some residents did not allow entry into their homes.”

“We had to make sure that the water tanks were completely sealed, so we wouldn't have to enter the residence. We would only pass on the guidelines to the resident on their doorstep, respecting social distancing.”

When asked whether they had received any type of training or qualification to take action in the face of new preventive measures against Covid-19, 93% said yes, they had received guidance on how to act in the face of this new challenge, preserving their health and that of the residents as well.

Graph 5. Representative for the question: Did you receive any training/guidance to adapt and respect the new preventive measures against Covid-19?



Source: Authors 2021.

They were asked what guidance AEs received from the health department regarding protective measures and new ways of working in homes. Among these guidelines, the ones most highlighted by agents are listed below.

“Wear a mask correctly, use alcohol gel, only enter residences with external passageways (corridors), keep your distance from residents, ask them to wear a mask when accompanying the visit and when returning to our residence, leave shoes and clothes outside the residence and then go take a shower.”

“Enter the home in the last circumstances, avoiding physical contact with the resident.”

“Guidelines on the use of PPE aimed at preventing Covid.”

“Do not force entry without the permission of the owner of the house” “only enter the residence if necessary.”

“Always use alcohol, avoid entering the home, preferring to go to the sides”

The World Health Organization (WHO) recommends the use of personal protective equipment (PPE) both for professionals who provide care in health services, but also in home care.

According to Brasil (2020), community agents were able to incorporate preventive measures for the pandemic situation into their routines and activities. Mata et al., (2020), also reports in their study that these measures were taken as a way to guarantee the safety of professionals and patients, as well as physical distancing (at least 1 and a half meters), use of protective equipment (PPE) and hygiene material (soap and water or 70% alcohol gel before and after the visit), entering homes only in cases of extreme need.

Mata et al., (2020) still presents challenges in relation to the structure and tools available to carry out the action, which are important, due to the reduction in the number of community agents, with the removal of those considered from risk groups, without due replacements. Taking these factors into account, it could be seen that it was difficult to establish better service for the population, as there were not many agents in charge.

According to data from FVS (2020), this can generate very critical impacts based on the situation of confronting the pandemic, in which, expanding the number of professionals is

necessary, due to the fact that there were constantly cases of people who ended up testing positive in several municipalities. There was also some opposition from residents to letting the AEs carry out their work, this is clear in the reports later:

“Many people still don’t like receiving our visits, so many ended up using quarantine as an excuse and this already excluded our visit; others were afraid of us infecting them and transmitting the virus to them.”

“Some people were afraid to let us into their homes”

“Residents were afraid of contamination by Covid-19, and prohibited us from entering the residence”

The fact that several residents did not allow AEs to enter ended up complicating the entire work process and carelessness in relation to mosquito proliferation. *Aedes Aegypti*, were left aside, and new cases of dengue emerged in the city and across the country. According to data from the Ministry of Health, there was a 149% increase in dengue cases in Brazil in 2020 and 2021 when compared to the same period in 2018.

Final considerations

As presented throughout the article, it is possible to reinforce the importance of the subject addressed, as it can strongly impact the importance of the work of Endemic Disease Agents and their fundamental role for public health in the prevention of endemic diseases. The information and data presented in this work contribute significantly to the field of study that has so far been little explored.

Therefore, the importance of developing new research in the area that until now has been little explored is highlighted. The content presented here demonstrates that much more research can still be carried out on the importance of the work of Endemic Disease Agents.

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