

Systemic Arterial Hypertension and Diabetes Before the COVID-19 Scenario, in Manaus, Amazonas, Brazilian Amazon

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ABSTRACT

Arterial hypertension and diabetes are serious concerns for public health in Manaus, Amazonas. The objective of the research was to identify the indicators of arterial hypertension and diabetes registered in the city of Manaus, Amazonas. Secondary data from VIGITEL, 2019, from the Ministry of Health were used. In adults aged ≥ 18 years, the percentage of those who reported medical diagnosis of arterial hypertension was higher in females. In treatment for arterial hypertension, the percentage was also more expressive in women. Regarding the medical diagnosis of diabetes in adults aged ≥ 18 years old, the female one stood out with the greatest record, as well as regarding the drug treatment of diabetes. In 2019, in Manaus, women had the highest record in both cases. In view of this situation, it is necessary to implement the actions, especially in primary care to guarantee the treatment of arterial hypertension and diabetes in people of both sexes aged ≥ 18 years.

KEYWORDS

Arterial hypertension, Diabetes, Municipality of Manaus.

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Introduction

Chronic non-communicable diseases (NCDs) kill 41 million people each year, which is equivalent to 71% of the deaths that occur in the world. In the Americas, 5.5 million deaths from NCDs

occur each year. Cardiovascular diseases constitute the majority of deaths (17.9 million each year), followed by cancer (9.0 million), respiratory diseases (3.9 million) and diabetes (1.6 million), worldwide [1].

In Brazil, NCDs correspond to 72% of the causes of death. In addition, data from the National Health Survey show that more than 45% of the adult population 54 million individuals, report at least one NCD [2-4]. In the municipality of Manaus, the mortality rate due to NCDs was 264.1 deaths / 100 thousand inhabitants in 2019 [5].

Diabetes is a chronic disease in which the body does not produce insulin or is unable to properly use the insulin it produces. Type 1 usually appears in childhood or adolescence, but can be diagnosed in adults; it is treated with insulin, medications, food planning and physical activities to help control the blood glucose level, and Type 2 appears when the body is unable to properly use the insulin it produces; or does not produce enough insulin to control the blood glucose level [6].

Approximately 90% of people with diabetes have Type 2, as it occurs more often in adults, but children can also have it. Depending on the severity, it can be controlled with physical activity and food planning. In other cases, it requires the use of insulin and / or other medications to control glucose [6].

The frequency of adults who reported a medical diagnosis of diabetes according to VIGITEL data varied between 4.6% in Porto Velho and 8.6% in Porto Alegre. And adults who reported drug treatment for diabetes ranged from 74.1% in Cuiabá to 93.8% in João Pessoa [7].

Given this, little is known about reports on the health condition involving hypertension and diabetes in Amazonas, which is important in view of the occurrence of COVID-19 in Manaus and other municipalities in the state. Therefore, the objective of this work was to describe the indicators of arterial hypertension and diabetes, recorded in Manaus, Amazonas using data from the survey in VIGITEL, 2019, Ministry of Health.

Methodology

The data were from circulation 1: 1st edition - 2020 - electronic version / VIGITEL Brasil 2019: Surveillance of risk and protective factors for chronic diseases by telephone survey: estimates on the frequency and sociodemographic distribution of risk and protective factors for chronic diseases in capitals of the 26 Brazilian states and the Federal District in 2019 (electronic resource) / Ministry of Health, Secretariat of Health Surveillance, Department of Health Analysis and Surveillance of Noncommunicable Diseases. Brasília: Ministry of Health, 2020.

Morbidity was consulted in order to obtain the frequency of adults, aged ≥ 18 years, who had a medical diagnosis and under drug treatment for hypertension and diabetes; the gender variable was used to assess the disease onset in men and women living in the municipality of Manaus, Amazonas, from January to December 2019.

Results and Discussion

Agreements

Arterial hypertension (AH)

In the municipality of Manaus, the percentage was 18.4% of adults aged ≥ 18 years, who reported a medical diagnosis of arterial hypertension (AH) in 2019, with a male gender of 17.1% (15.8 - 21.0 : 95% CI) and female 19.7% (16.6 - 22.8: 95% CI). Regarding the treatment for AH, the percentage of adults was 72.6% (64.4 - 80.9: 95% CI), of which, the male gender was 65.8% (50.8 - 80, 7: 95% CI) and the female was 78.1% (70.4 - 85.9: 95% CI), Tabela 1. Arterial hypertension (AH) is a chronic non-transmissible disease (CNCD), characterized by persistent elevation of blood pressure (BP), that is, systolic BP (SBP) greater than or equal to 140 mmHg and / or diastolic BP (DBP) greater or equal to 90 mmHg. According to the 2013 National Health Survey, 21.4% (95% CI 20.8-22.0) of Brazilian adult authors reported AH [8].

According to data from VIGITEL 2019, the frequency of adults with a medical diagnosis of hypertension varied between 16.9% in São Luís and 28.5% in the Federal District. Adults who reported drug treatment ranged from 68.8% in Porto Velho to 89.7% in Belém [7]. It was observed that in Manaus, the percentage of adults who reported a medical diagnosis of AH in 2019 was more expressive in women.

Public health care policies must be directed to everyone with the maintenance of the sustainability of actions. Special attention is given to the uncontrolled portion of hypertensive patients who must be contemplated with special promotion, prevention and control strategies to minimize or avoid complications resulting from uncontrolled disease [9], but according to the records in 2019 in Manaus, there is a certain weakness in primary care for this condition.

Diabetes

Table 1 shows that in Manaus, the medical diagnosis of diabetes in adults (≥ 18 years old) was 6.0% (4.6 - 7.4: 95% CI), non-male 5.4% (3.4 - 7.4: 95% CI) and not female 6.6% (4.5 - 8.6: 95% CI). As for drug treatment of diabetes in adults, it was 85.1% (75.0 - 95.2: 95% CI), non-male 72.1% (52.4 - 91.9: 95% CI) and non-female 94, 8% (89.7 - 100.0: 95% CI).

The record of cases of major diabetes in women, draws attention to the need to highlight the causes in this specific group, in Manaus, as well as the adherence to drug treatment of diabetes in being lower in men. Assistance to people with diabetes requires a multidisciplinary approach to care planning with an emphasis on following an eating plan, physical activity, glycemic monitoring / control, and also the use of hypoglycemic drugs since in people with the disease, failure to comply with the medical prescription may interfere with the assessment of the clinical response and cause therapeutic failure that will result in an increase in blood glucose with consequent acute and chronic complications [10,11].

In Brazil, until April 20, 2020, of the registered deaths, 72% were

related to COVID-19 and were over 60 years old, and 70% had at least one risk factor. Heart disease was the main associated morbidity, followed by diabetes, neuropathy, kidney disease and neurological disease [12]. What draws attention to the knowledge of the real situation of this condition in the region in view of the current scenario related to COVID-19, especially in the capital of Amazonas.

According to the World Health Organization (WHO), one in four people living with chronic diseases are at increased risk of becoming seriously ill and dying of COVID-19 [13]. Studies carried out with patients in China and elsewhere pointed to a higher risk of worsening and death from COVID-19 in people who have pre-existing diseases [12].

Grievances	Total		Sex			
			Male		Female	
	%	IC 95%	%	CI 95%	%	CI 95%
Systemic arterial hypertension						
Medical diagnostic	18.4	15.8-21.0	17.1	15.8-21.0	19.7	16.6-22.8
Treatment	72.6	64.4-80.9	65.8	50.8-80.7	78.1	70.4-85.9
Diabetes						
Medical diagnostic	6.0	4.6-7.4	5.4	3.4-7.4	6.6	4.5-8.6
Treatment	85.1	75.0-95.2	72.1	52.4-91.9	94.8	89.7-100.0

Table 1: Record of cases of hypertension and diabetes in adults ≥ 18 years of age, in the municipality of Manaus, Amazonas, in 2019.

Source: VIGITEL Brasil 2019

Final Considerations

Regional, demographic differences should be considered by health professionals, researchers, managers and public policy makers to face chronic non-communicable diseases (NCDs) in Manaus, facilitating people's access to adequate diagnosis and treatment, especially in care closer to their homes, with a view to reducing low adherence. Adherence to the treatment of AH by women needs to be implemented, as well as the diagnosis and treatment of diabetes in men due to the low record in 2019.

In view of the current pandemic situation of COVID 19 in 2020 and in January 2021, in Manaus, the driving force certainly contributed to discontinue routine services in primary care and other levels of care, due to the need for health professionals to act to face this problem. emerging disease, a worrying scenario in the city of Manaus, currently deserving the use of new strategies, such as the use of telemedicine instead of face-to-face assistance, and the performance of screening aimed at identifying people in the age group considered to be at greater risk of developing hypertension and diabetes due to different factors.

In the current scenario related to the COVID-19 pandemic, scientists argue that two categories of diseases that are interacting in specific populations, one being severe acute respiratory syndrome corona

virus 2 (SARS-CoV-2) and another series of non-communicable diseases (NCDs); conditions that are in social groups according to patterns of inequality in societies, and the aggregation of these diseases in a context of social and economic disparity exacerbated by the adverse effects of each disease separately.

Coping with COVID - 19 involves not only fighting the spread of the virus, but also correcting the social condition of people most vulnerable to the disease, those who suffer diseases such as cancer, diabetes, obesity and other diseases¹⁴. In Manaus, Amazonas, maintaining sustainable monitoring of actions involving hypertension and diabetes in adults, guaranteeing access to diagnosis and adequate treatment of affected people, is of fundamental importance for the prevention and control of related diseases, which may occur in the future.

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