

Occurrence of Hospitalizations for Causes Sensitive to Primary Health Care in indigenous people in Roraima, Amazon, Brazil 2011 to 2022.

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The analyzed data highlight the relevance of primary care in providing health services in the Amazon regions, with an emphasis on indigenous communities. The implementation of inclusive public policies that take into account the cultural specificities and socioeconomic disparities of these populations is crucial. Additionally, it is necessary to improve healthcare infrastructure and continuously train professionals working in remote areas to ensure more effective and tailored healthcare that meets local demands.

BACKGROUND

This study aimed to analyze the temporal trend of hospitalizations for Ambulatory Care Sensitive Conditions (ACSC) among indigenous residents of the state of Roraima, located in the Brazilian Amazon, between 2011 and 2022. Primary health care plays a critical role in preventing conditions that, if not adequately addressed, can lead to hospital admissions. ACSC serve as indirect indicators of the effectiveness of primary health services and reflect the health system's ability to provide preventive and first-line care.

METHODS

This ecological time-series study analyzed ACSC among indigenous residents of the state of Roraima, based on notifications recorded in the Hospital Information System of SUS (SIH-SUS). The proportions of hospitalizations for ACSC were calculated, stratified by ethnicity and age group. Additionally, the proportion of hospitalizations among indigenous peoples was analyzed according to the main underlying causes of admission. The study aims to provide insights for improving public health policies directed at indigenous populations, particularly in hard-to-reach areas such as the Amazon region.

RESULTS

Figure 1 Percentage of hospitalizations for ACSC according to ethnicity indigenous - Roraima, AM, Brazil - 2011 to 2022

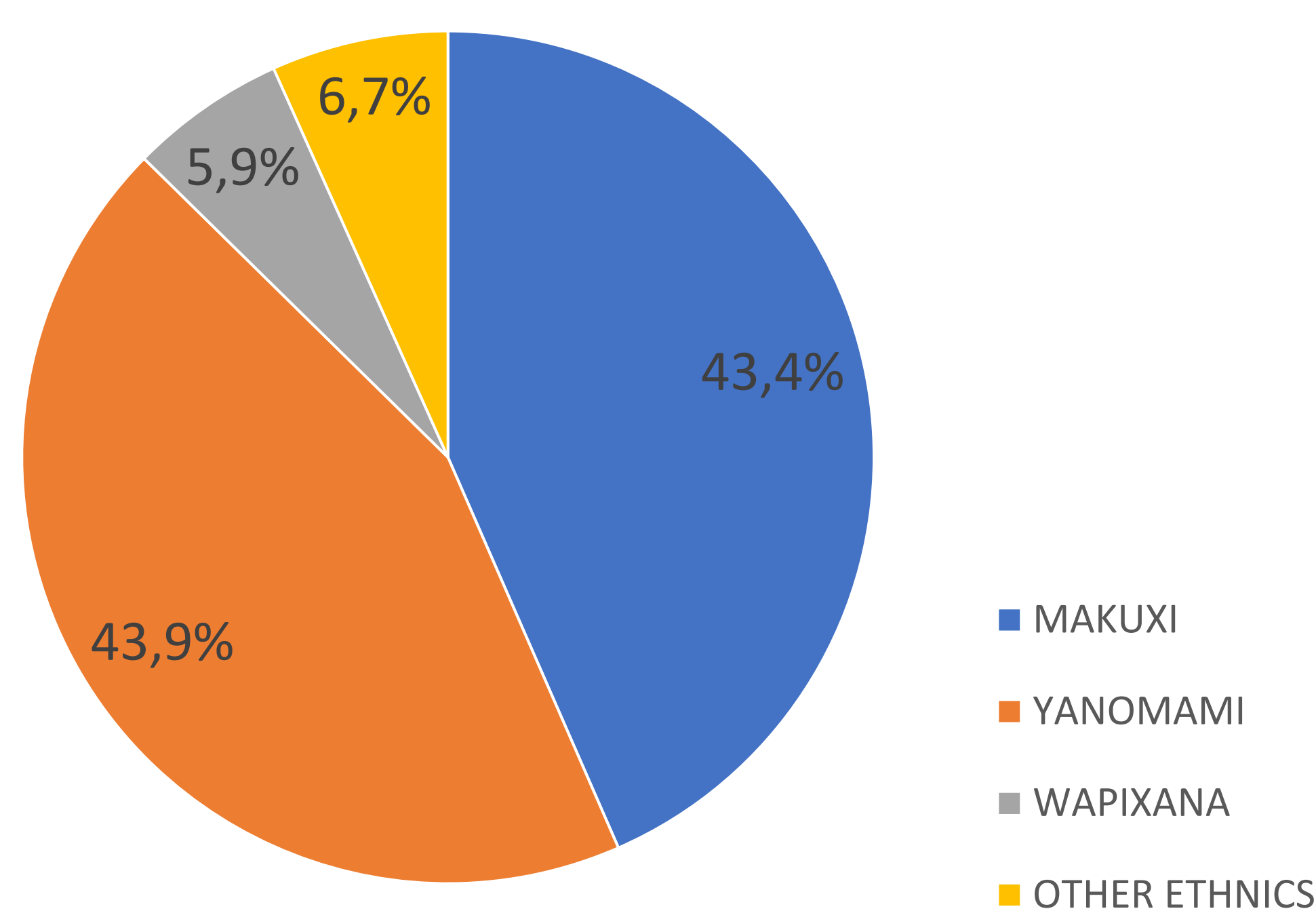


Figure 2: Hospitalizations for ACSC according to age group in indigenous people - Roraima, AM, Brazil - 2011 to 2022

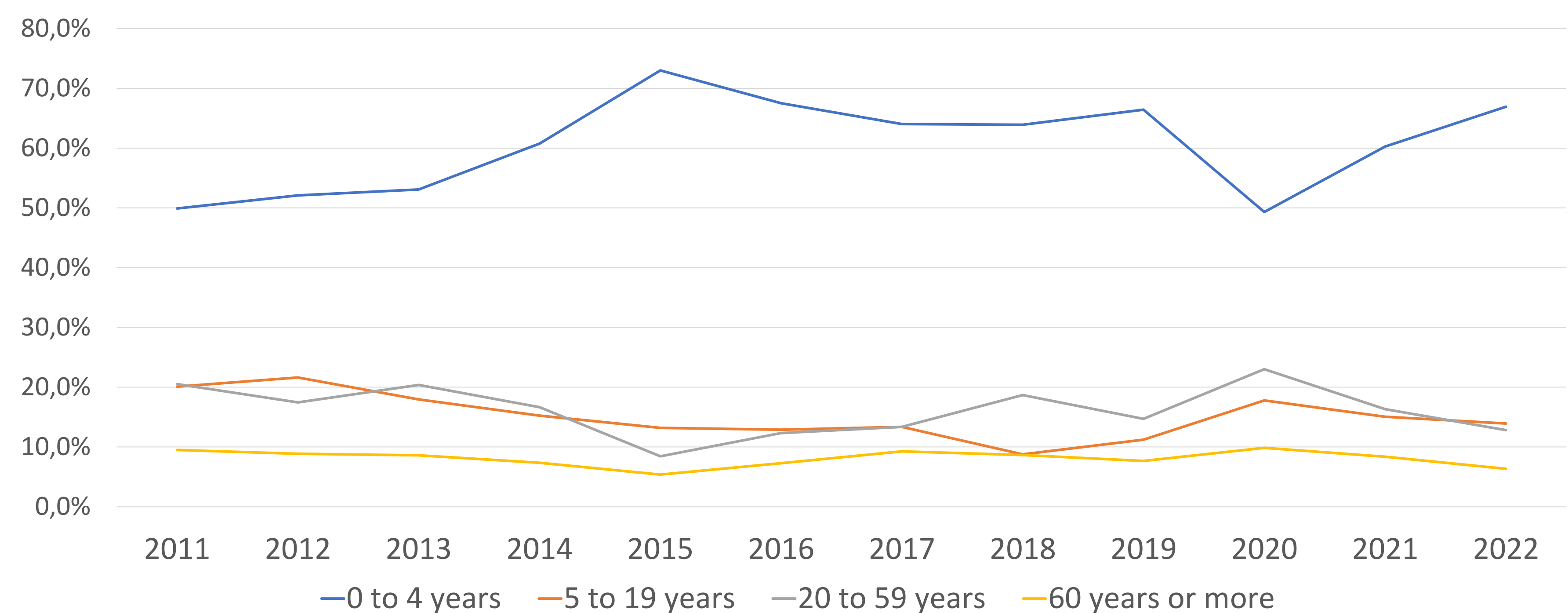


Table 1: Proportion and hospitalizations for ACSC in indigenous people according to cause - Roraima, AM, Brazil - 2011 to 2022

%Cause of hospitalization	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Bacterial pneumonia	0,2	0,3	0,9	1,3	34,4	35,7	42,2	40,4	36,5	27,3	34,2	36,8	27,5
Gastroenteritis	39,1	39,3	35,5	47,9	24,4	24,1	15,3	14,7	19,4	12,0	12,4	16,2	23,2
Infection. skin and subcutaneous	20,9	21,1	17,8	19,2	13,5	14,3	15,0	10,4	8,6	12,8	7,0	6,4	12,9
Prev. vaccination and cond. avoidable	5,1	6,1	5,2	3,4	5,4	2,9	3,5	7,2	10,5	15,7	11,9	9,1	7,3
Infection. urinary	15,0	8,6	13,3	9,9	6,8	5,3	4,9	7,8	4,1	4,5	3,5	2,8	6,6
Defic. nutritional	2,5	5,2	6,2	2,2	1,8	3,2	3,5	2,2	3,4	6,2	8,2	8,5	4,5
Diabetes mellitus	5,5	3,9	4,5	5,0	1,8	1,8	4,9	3,9	3,7	6,0	3,6	3,6	3,9
Prenatal and childbirth	1,9	1,5	2,4	1,4	2,3	2,5	0,1	4,3	3,8	4,8	6,1	4,2	3,1
Pulmonary (COPD)	0,9	2,7	5,6	3,1	3,4	2,1	2,6	3,2	3,9	1,4	4,2	2,6	3,0
Insuf. cardiac	0,6	1,5	0,6	1,3	0,8	2,2	2,7	1,4	1,6	3,1	2,2	2,1	1,7
Epilepsies	2,5	3,0	2,1	0,9	2,3	1,7	1,8	0,5	1,3	1,4	2,0	1,0	1,6
Infec. ear, nose and throat	1,5	4,2	2,8	1,8	1,2	1,4	0,5	0,6	0,6	0,2	0,8	1,8	1,3
Cerebrovascular	0,4	0,0	0,2	0,4	0,3	0,7	1,4	0,6	0,9	1,9	1,4	1,5	0,9
D. infl. female pelvic organs.	0,4	0,7	0,4	0,5	0,2	0,3	0,4	0,9	0,7	1,6	1,3	1,7	0,8
Asthma	2,1	1,2	1,1	0,5	0,8	0,8	0,4	0,4	0,1	0,2	0,3	1,1	0,7
Hypertension	1,1	0,5	1,1	0,9	0,8	0,4	0,3	0,9	0,3	0,6	0,4	0,6	0,6
Gastrointestinal ulcer	0,2	0,3	0,4	0,4	0,0	0,3	0,4	0,4	0,5	0,4	0,4	0,1	0,3
Angina	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,1	0,2	0,1
Anemia	0,0	0,0	0,0	0,2	0,0	0,1	0,0	0,0	0,0	0,2	0,0	0,0	0,0
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

CONCLUSIONS

The presented results highlight the need for more targeted strategies for the indigenous populations of Roraima, particularly in relation to child health and the prevention of conditions such as pneumonia and gastroenteritis, which account for a significant proportion of avoidable hospitalizations. The predominance of hospitalizations among children under five years of age may be linked to deficiencies in primary care and insufficient vaccination coverage, in addition to factors related to nutrition and basic sanitation in indigenous communities.

Furthermore, the high occurrence of hospitalizations among the Yanomami and Macuxi ethnic groups suggests that these populations face worse health outcomes due to geographic and cultural barriers in accessing healthcare services. This reinforces the need for cultural adaptations and investments in specialized health teams capable of addressing the specific needs of these communities.

This format more clearly presents the epidemiological factors and highlights the structural and public health barriers that influence the observed outcomes.

ADDITIONAL KEY INFORMATION

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