

CORRELATION BETWEEN SARS-COV-2 HEALTH EMERGENCY AND CHILD OBESITY: ECOLOGICAL STUDY

Karina Juliana Guerra Hayashi

Academic of the Medical Course of the institution: Universidade Nove de Julho.

Victória Maso Panassol

Academic of the Medical Course of the institution: Universidade Nove de Julho

Rebeca Luciano Callou Coutinho

Academic of the Medical Course of the institution: Universidade Nove de Julho

Thais Pereira dos Passos

Academic of the Medical Course of the institution: Universidade Nove de Julho

Danielle de Oliveira Castro

Academic of the Medical Course of the institution: Universidade Nove de Julho

Eduardo Fernandes de Lima

Academic of the Medical Course of the institution: Universidade Nove de Julho

Heloisa Vianello Garcia Richtzenhain

Doctor. Graduated by the institution: Universidade Federal de São Paulo – UNIFESP. Medical residency in the area of pediatrics by the institution: Universidade Federal de São Paulo – UNIFESP. Preceptor of the primary health care internship at the University Medicine course: Nove de Julho

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Abstract: Introduction: The pandemic induced by SARS-CoV-2 affects families in situations of vulnerability and thus requires that adaptations related to food be made, such as the substitution of foods with good nutritional content for those with excessive glycidic composition, and which, with consequences, have the Obesity, which in Brazil affects about 13.2% of children aged 5-9 years treated in the Unified Health System (SUS). **Objective:** to analyze the possible correlation of the health situation of SARS-CoV-2 with childhood obesity. **Method:** This is an ecological time series study in which information was collected in the City's epidemiological surveillance system. As well as analyzed the data available in the Food and Nutrition Surveillance system in order to observe the panorama of Obesity in this population. The search took place in August 2021. The variables analyzed using descriptive statistics were the Child Body Mass Index (BMI), accessibility to health services, based on the diagnosis of Obesity. **Results: In table 1 are the comparisons** of the percentage of childhood obesity analyzing BMI and age, in 2019 (pre-pandemic) and 2021 (one year after the beginning of the pandemic) in the city of Osasco-SP, in the state of São Paulo, in the Southeast region and in Brazil, in order to demonstrate **the impact of the pandemic on SARS-CoV-2.** Analyzing the data shown in the table, a percentage decrease in childhood obesity is observed in the city of Osasco (0.38%), in the Southeast region (0.34%) and in Brazil (0.3%), however in the state of São Paulo there was an increase of 0.35% in this rate. The descriptive analysis of the data indicates that the Body Mass Index (BMI) of children, with a Z score above + 2, and that the female gender are within this scope. It was observed that those children under five had a BMI, Z score greater than +3, receiving the diagnosis of obesity. In this context, it

is pointed out that the main obesity-related factors identified were: qualitative food error, characterized by the excess consumption of ultra-processed, cheap, hypercaloric foods with a high level of sugar and sodium; sedentary lifestyle and increased screen use.

Conclusion: Analysis refers to a growing increase in the occurrence of food errors, as a result of social and economic issues and the increase in the use of screens as a means of children's entertainment. Despite the clear increase in risk factors, obesity rates in practice have not yet been observed, however, future studies must be carried out with the aim of tracking late complications or future development of obesity.

Keywords: Child obesity, SARS-COV, COVID-19.

IMCX AGE - YEAR 2019

STATE	City	Thinness acentuada		.Thinness		Eutrophy		Risco de Overweight		Overweight		Obesity		Total
		Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	
SP	OSASCO	289	3.06%	270	2.86%	5.598	59.19%	1.780	18.82%	788	8.33%	732	7.74%	9.457
TOTAL IN THE STATE OF SÃO PAULO		10.938	2.17%	13.821	2.75%	318.970	63.4%	91.444	18.18%	37.851	7.52%	30.087	5.98%	503.111
TOTAL IN THE SOUTHEAST REGION			3.01%	45.523	3.28%	875.561	63%	240.535	1731%	101.321	7.29%	85.060	6.12%	1.389.868
TOTAL IN BRASIL		164.894	334%	176.016	3.56%	3.028.250	6127%	843.104	17.06%	386.466	7.82%	343.622	6.95%	4.942.352

IMCX AGE - YEAR2021

STATE	City	Thinness acentuada		.Thinness		Eutrophy		Risco de Overweight		Overweight		Obesity		Total
		Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%	
SP	OSASCO	38	0.39%	73	0.74%	4.918	50.13%	2.705	27.57%	1.354	13.8%	722	7.36%	9.810
TOTAL IN THE STATE OF SÃO PAULO		2.913	1.01%	6.182	2.15%	181.747	63.15%	56.676	19.69%	22.084	7.67%	18.206	6.33%	287.808
TOTAL IN THE SOUTHEAST REGION		9.418	152%	15.774	2.54%	391.248	63.12%	119.292	1925%	48.235	7.78%	35.843	5.78%	619.810
TOTAL IN BRAZIL		34.977	2.02%	47.338	2.73%	1.047.181	60.49%	337.585	195%	148.971	8.61%	115.160	6.65%	1.731.212