

Eating practices and physical mastery of the quality of life of adults: A Brazuca, Natal study in the context of the Covid-19 pandemic

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ABSTRACT

A study in Natal, Brazil is looking at how people's eating habits since the Covid-19 pandemic are affecting their physical health. Adults between 20 and 59 were surveyed about their diet and overall well-being, with a specific focus on physical quality of life. Researchers will compare people who reported following unhealthy eating habits to those who didn't to see if there's a connection between diet choices and physical health after the pandemic. This will help them understand how what people eat is impacting their physical well-being in Natal.

Keywords: Physical domain, Quality of life, Adults, Feeding practices, Covid-19.

INTRODUCTION

The epidemiological and nutritional scenario of the last decades has been dynamic, in view of global and lifestyle changes resulting from urbanization and industrialization, directly interfering in eating patterns. The food and dietary profile of the populations has come to be characterized by high energy density, with foods low in fiber, rich in fats and sugars, which have a high degree of processing (Costa *et al.*, 2017). Taking this into account, Brazil has changed its guidelines in relation to the Food Guide, incorporating guidelines for healthy eating practices based on food processing, culturally appropriate and sustainable, with a view to promoting the autonomy of individuals and populations, health promotion and prevention of food-related diseases (Brasil, 2014; Gabe; Jaime, 2022). In this sense, estimating the adherence of Brazilians to the recommendations of the food guide for the Brazilian population is relevant, since an individual's eating practices are influenced by time, space and the social context in which they occur (Gabe; Jaime, 2022). In addition, the COVID-19 pandemic has had a major impact on the population's lifestyle, including changes in eating habits, indicating an increase in the frequency of fast-

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food consumption, in contrast to a decrease in the consumption of fruits and vegetables (Souza *et al.*, 2022). Diet quality stands out among the multiple predictors of poorer quality of life (Arpini *et al.*, 2014). Specifically, it can directly affect quality of life (QoL) and its domains, especially the physical domain, which encompasses factors such as pain, fatigue, sleep, activities of daily living, medication dependence, and work capacity (Fernandes, 2023). Thus, the main objective of this study is to analyze the relationship between eating practices opposed to the recommendations of the Food Guide for the Brazilian Population, and the physical domain of quality of life in adults in the city of Natal-RN, after the COVID-19 pandemic.

MATERIALS AND METHODS

Cross-sectional household-based study, nested with a cohort, linked to the project "The BRAZUCA Natal study in the context of the covid-19 pandemic: impact on nutrition, health and risk of chronic diseases", which was submitted to and approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte (Certificate of Presentation and Ethical Appreciation: 60777522.0.0000.5292). For the selection of this study, the information collected in the second wave of the cohort was considered. Data collection was carried out from March 2023 to March 2024, and adults (20 to 59 years old) of both sexes, who lived in the city of Natal-RN and who previously participated in the first wave, held in 2019, were included. To this end, a standardized questionnaire was used on the Epicollect 5 digital platform. Dietary practices contrary to the recommendations of the Food Guide were measured according to the items in part B of the multidimensional scale proposed by Gabe and Jaime (2020). To measure the score of the physical domain of quality of life (QoL) of the study population, the WHOQOL-bref instrument was used (Fleck *et al.*, 2000). The highest quality of life in the physical domain was considered to be above the median, and the lowest quality of life in the physical domain was considered to be below the median. To verify the normality of the data distribution, the Shapiro-Wilk test was applied. Thus, for the parametric data, in order to verify the difference in the mean QoL score in the physical domain in relation to the answers "always/strongly agree", "many times/agree", "rarely/disagree" and "never/strongly disagree" for each question of part B of the GAPB multidimensional adherence scale, ANOVA and post-hoc test (Bonferroni) were performed, and for those with non-parametric distribution, the distribution of the score of the physical domain of QoL in the answers "always/strongly agree", "often/agree", "rarely/disagree" and "never/strongly disagree" was performed in quartiles and using the Kruskal-Wallis test. Pearson's chi-square test was also performed to verify the association between COVID-19 diagnosis and low/high QoL of the physical domain. For all analyses, $p < 0.05$ was considered significant.



FINDINGS

The study included 53 adults with a mean age of 41.91 years (1.49), 64.15% of whom were female. Of the total population studied, 41.51% reported not having been diagnosed with COVID-19, 56.60% said yes, and 1 (1.89%) did not answer. Regarding Quality of Life (QoL), 49.10% had high quality of life in the physical domain (score > 71.43%) and 50.90% had low quality of life in the physical domain (score ≤ 71.43%). There was no statistically significant association between COVID-19 diagnosis and QoL of the physical domain. However, there was a higher frequency (53.33%) of adults with a positive diagnosis for COVID-19 with low quality of life in this domain. When the dietary practices opposite to the GAPB recommendations were evaluated, no significant difference was observed between the responses to these variables and the QoL of the physical domain ($p > 0.05$). Despite this, it was noted that the question with the highest percentage (75.47%) of concordant answers was "When I drink coffee or tea, I usually add sugar", in which 37 individuals answered that "always/strongly agree" adopt this practice and 3 adopt "often/agree". Regarding the percentage of discordant answers, the questions with the highest percentage were "I usually drink industrialized juices, such as box, powder, bottle or can" (96.23%, 13 answered that "rarely/disagree" adopt this practice and 38 "never/strongly disagree" adhere to it) and "I usually go to fast-food restaurants or snack bars" (96.23%, 26 answered that "rarely/disagree" adopt this practice and 25 "never/strongly disagree" adhere to it).

FINAL CONSIDERATIONS

The study showed a higher frequency of individuals with low quality of life in the physical domain, after the diagnosis of COVID-19. Although no statistically significant association was found between QoL in the physical domain and the eating practices analyzed, a significant percentage of concordant responses to the practice of sweetening beverages (coffee or tea) with sugar was observed. Sugar has no nutritional value and confers health risk when consumed in excess, being associated with the development of chronic non-communicable diseases. This can impact the individual's quality of life, including their physical aspects. At the same time, high percentages of discordant responses to eating practices not aligned with the GAPB were identified, regarding the consumption of industrialized juices and the act of frequenting fast-food restaurants, demonstrating positive eating practices.



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