FOOD AND NUTRITION IN COLLECTIVE HEALTH

DOI: 10.12957/demetra.2022.61924



- Jerusa da Mota Santana¹
 Valterlinda Alves de Oliveira Queiroz²
- Caroline Nascimento dos Anjos²
- Patrícia Rocha de Freitas²
- Dejanira Alves de Souza²
 Nedja Silva dos Santos²
 Sandra Maria Chaves dos

Santos²

- ¹ Universidade Federal do Recôncavo da Bahia, Centro de Ciências da Saúde, Santo Antônio
- ² Universidade Federal da Bahia, Escola de Nutrição. Salvador, BA, Brasil

Correspondence
Jerusa da Mota Santana
ierusanutri@ufrb.edu.br

de Jesus, BA, Brasil

Addressing food and nutritional insecurity in Bahia municipalities in the context of the COVID-19 pandemic

Enfrentamento da insegurança alimentar e nutricional em municípios baianos no contexto da pandemia da Covid-19

Abstract

Introduction. Covid-19 pandemic has made it possible to worsen the situation of food and nutritional insecurity (FNI) in the population. Objective. To analyze the main institutional strategies for coping with FNI in the context of the Covid-19 pandemic in Bahian municipalities. *Methods*. This is an ecological study conducted from March to May 2020 in 44 municipalities in Bahia. The information was collected through consultations with the Official Gazette (OG) of the municipalities, with a survey of the strategies adopted to cope with FNI. The strategies identified were classified into the dimensions: income and living conditions; health, nutrition, and access to health services; food production and availability; access to adequate and healthy food and education. Results. The main strategies for coping with FNI adopted were the dimension "income and living conditions" - with the provision of tax incentives (45.5%); the dimension "access to adequate and healthy food" - with strategies for distributing food or food cards to students enrolled in schools (38.6%) and distribution of basic food basket (34.1%). Conclusion. This study revealed low coverage of the strategies adopted by Bahian municipal executives to cope with FNI during the Covid-19 pandemic. The study highlights the need for greater social protection through government actions. It is essential that short-, medium- and long-term intersectoral measures be taken to serve, primarily, the most vulnerable populations in order to mitigate the social and economic impacts during and after the pandemic.

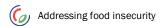
Keywords: Covid-19 pandemic. Public Health Policies. Right to Adequate Food.

Resumo

Introdução. A pandemia da Covid-19 possibilitou o agravamento da situação de insegurança alimentar e nutricional (IA) na população. Objetivo. Analisar as principais estratégias institucionais de enfrentamento da IA no contexto da pandemia da Covid-19 em municípios baianos. Métodos. Trata-se de estudo ecológico realizado no período de março a maio de 2020 em 44 municípios da Bahia. As informações foram coletadas por meio de consultas aos Diários Oficiais (DO) dos municípios, com levantamento das estratégias adotadas para o enfrentamento da IA. As estratégias identificadas foram classificadas nas dimensões: renda e condições de vida; saúde, nutrição e acesso aos serviços de saúde; produção e disponibilidade de alimentos; acesso à alimentação adequada e saudável e educação. Resultados. As principais estratégias de enfrentamento da IA adotadas foram da dimensão "renda e condições de vida" – com a oferta de incentivos fiscais (45,5%); a dimensão "acesso à alimentação adequada e saudável" – com estratégias de distribuição de alimentos ou cartão alimentação para alunos matriculados nas escolas (38,6%) e distribuição de cesta básica (34,1%). Conclusão. Este estudo revelou baixa cobertura das estratégias

adotadas pelos executivos municipais baianos para enfrentamento da IA durante a pandemia da Covid-19. O estudo evidencia a necessidade de maior proteção social por meio de ações governamentais. É primordial que medidas intersetoriais de curto, médio e longo prazos sejam tomadas para atender, especialmente, às populações mais vulnerabilizadas, no intuito de mitigar os impactos sociais e econômicos durante e após a pandemia.

Palavras-chave: Políticas Públicas de Saúde. Direito à Alimentação Adequada. Pandemia por Covid-19.



INTRODUCTION

The world faces a severe health crisis caused by Coronavirus disease (Covid-19) caused by the SARS-CoV-2 virus. This disease is characterized as a pandemic officially recognized by the World Health Organization (WHO) in March 2020 and continues to sicken and kill thousands of people on every continent.¹²

Epidemiological data revealed that SARS-CoV-2 has a high transmission rate, lethality, and mortality rate.³ Given the high transmissibility, social isolation was one of the virus's main preventive and containment measures.⁴ Results of studies in Brazil have reported that social isolation effectively reduces the transmission rate of Covid-19 in the country,⁵⁻⁷ mainly associated with the use of masks⁶ to the isolation of cases and quarantine of contacts.⁵

Despite the effectiveness of these public health measures in reducing the number of cases of Covid-19, there are negative impacts on the economic and social conditions of the population. Consequently, it leads to increased unemployment and, therefore, to the reduction of income of the population, ⁸⁹ contributing to the increase in the number of people in situations of food and nutritional insecurity (FNI). ¹⁰

Food and nutrition security (FNS) means the realization of the right of each person, family, or nation to access food in sufficient quantity and quality to meet biological, cultural, and subjective needs, on a regular and continuous basis. It is based on health-promoting food practices that respect cultural diversity and are environmental, culturally, economically and socially sustainable.¹¹

Although FNS is a right,¹¹ this condition is not present in all households. Nationwide studies conducted by the Brazilian Institute of Geography and Statistics (IBGE) and the Brazilian Research Network on Food and Sovereignty and Security (PENSSAN Network), with the application of the Brazilian Food Insecurity Scale (EBIA)^{12,13} in a sample of private households, revealed a decrease in the proportion of households in FNS situation, from 79.5% in 2013.¹⁴ to 64.9% in 2017-18,¹² and 41.3% in 2022.¹³ There was also an increase in the occurrence of severe FNI, characterized by the presence of hunger at home in the last three months, from 5.8% (2017/2018)¹² to 15.5%, an even worse situation among rural residents (18.6%).¹³

Recent surveys reflect the last four years in which setbacks in the population's living conditions have been observed, with more unemployment, increased extreme poverty, and lower purchasing power among the socially disadvantaged. Government measures also weakened health and FNS systems, such as the extinction of the National Council for Food and Nutrition Security (CONSEA), impacting the food and nutrition agenda. 10,16

This social scenario installed in Brazil, associated with the impacts of the pandemic, is configured as a driving environment for increased FNI. Therefore, all managers and organized civil society of municipalities are called to act to mitigate hunger and promote the most vulnerable populations, articulating all its dimensions, taking into account both its food component (availability, production, marketing, and access to food) and nutritional (focus on food practices and biological use of food).¹⁰

The main strategies adopted by Brazilian municipalities and states are related to the food component, such as: encouraging family farming based on the institutional purchase of food for schools and hospitals, the distribution of food kits to students' families, offering meals to the most vulnerable populations, especially the homeless population, through popular restaurants and financial aid for the informal workers.¹⁷

Thus, considering that the knowledge of successful experiences can support the making of future political decisions since the consequences of FNI will not disappear along with the pandemic, this investigation is justified, aiming to analyze the main institutional strategies for coping with FNI in the context of the Covid-19 pandemic in Bahian municipalities.

METHODS

This is an ecological study, with documentary research, of a convenience sample whose unit of analysis included all 44 municipalities in the state of Bahia with a population equal to or greater than 50.000 inhabitants, based on the IBGE classification of 2010. The population living in these municipalities represents half of the population of the state of Bahia.

The information was collected through consultations with the Official Gazettes (OG) of each municipality, with a record of all strategies adopted by the municipalities to cope with FNI within the scope of the Departments of Health, Social Action, Education, or any other mentioned in the document. Documents published from March 11 to May 11, 2020, the first 60 days after the WHO raised the state of contamination of the Covid-19 to the pandemic, were consulted. ¹⁸ The full reading of decrees, public purchases (electronic trading session), extract of contracts, and ordinances were completed.

The information collected in the OG were: strategies adopted by the municipalities in coping with Covid-19; OG number; date of validity of the strategy; target audience of the strategy and summary description of the strategy. The records of all strategies adopted by the municipalities were recorded in a structured spreadsheet.

Information related to the socioeconomic characteristics of these municipalities was also collected: Gini Index, Income Ratio, and Municipal Human Development Index (MHDI), the latter collected from IBGE cities website, and the other from DATASUS. Moreover, information on the existence of the Municipal Council of Food and Nutrition Security (COMSEA) in the state of Bahia, a strategic body in the construction agenda of municipal public policies aimed at promoting FNS, was collected from the COMSEA-BA database.

After identifying the strategies for coping with FNI in the municipalities, these were classified through the dimensions of the FNS present in the Report Diagnosis of Food and Nutritional Security of the State of Bahia¹⁹, namely: income and living conditions (financial aid for the vulnerable population, tax incentives, actions to encourage the strengthening of local trade); health and nutrition and access to health services (reception for the homeless population, a reference center for the care of cases in Covid-19); food production and availability (strategies aimed at strengthening family farming); access to adequate and healthy food (distribution of basic baskets for the vulnerable population, supply of foodstuffs distributed in the form of kits or cards to parents or guardians of students and access to the popular restaurant); education (carrying out educational actions, production of teaching materials).

The data were organized and analyzed in the SPSS Program, version 20.0. Descriptive analysis was performed, being percentages for categorical variables. This research used data from the public domain and does not involve the participation of human beings. Thus, it did not require a submission to the Research Ethics Committee (CEP).

RESULTS

The sum of the population of the 44 municipalities included in the sample is 7.337.558 inhabitants (data not shown in tables); of these municipalities, 45.5% (N = 20) have COMSEA; 6.8% (N = 3) of these created reference centers for covid-19 care (Table 1).

Table 1. General characteristics of Bahia municipalities included in the study, Bahia, 2020.

	N	%
Municipalities with CONSEA*		
Yes	20	45.5
No	14	31.8
No information	10	22.7



Table 1. General characteristics of Bahia municipalities included in the study, Bahia, 2020.(Continues)

	N	%
Creation of a Reference Center for Covid-19 cases**		
Yes	3	6.8
No	41	93.2

Source: *CONSEA-BA; **Official Gazette of the municipalities.

Regarding the strategies for coping with N in the population, 17 municipalities (38.6%) adopted an intervention strategy to ensure FNS. However, nine municipalities (20.5%) did not adopt any type of additional strategy considering the pandemic scenario, considering the search engines adopted (Table 2).

Table 2. Institutional strategies to face food and nutritional insecurity in municipalities in Bahia in the context of the Covid-19 pandemic, Bahia, 2020.

Strategies	N	%
Number of strategies adopted		
No strategy	9	20.5
1 strategy	17	38.6
2 strategies	11	25.0
3 strategies	4	9.1
4 or more strategies	3	6.9
Tax incentives		
Yes	20	45.5
No	24	54.5
Supply of foodstuffs distributed in the form of kits or cards to parents or guardians of students		
Yes	17	38.6
No	27	61.4
Distribution of staple food baskets to the vulnerable population		
Yes	15	34.1
No	29	65.9
Popular restaurant		
Yes	6	13.6
No	38	86.4
Home for the homeless		
Yes	4	9.1
No	40	90.9
Financial assistance for the vulnerable population		
Yes	2	4.5
No	42	95.5
Encouraging the strengthening of local commerce		
Yes	1	2.3
No	43	97.7

Source: Official Gazette of the municipalities.

Among the strategies for coping with FNI mentioned in the analyzed documents, the most prevalent was the adoption of tax incentives (45.5%; N = 20) – for example, the extension of payment of the Urban Property and Land Tax (IPTU) and municipal permits and permits granted by the government – followed by the supply of foodstuffs in the form of kits or food cards for students (38.6%; N = 17) and distribution of basic baskets for the needy population (34.1%; N = 15) (Table 2).

Strategies such as a reception for the homeless population (9.1%; N = 4), financial aid for the most vulnerable population (4.5%; N = 2), and incentives to local commerce (2.3%; N = 1) were the least prevalent among the investigated municipalities (Table 2).

Of the 17 municipalities that had strategies specifically aimed at students, 15 (88.2%) distributed kits with foodstuffs and two (11.8%) of them distributed voucher cards for the removal of foodstuffs in accredited establishments (data not shown in tables).

It should be noted that, of the 44 municipalities, 13.6% (N = 6) had popular restaurants, and during the pandemic, 50% of these (N = 3) maintained their functioning (data not shown in tables).

The strategies for coping with FNI adopted in the municipalities were grouped according to the dimensions of FNS, as shown in Figure 1.

It was observed that 61.4% (N = 27) of the municipalities presented a coping strategy for FNI in the dimension "access to adequate and healthy food". Of these, 81.5% (N = 22) adopted only one strategy. Regarding the dimension "income and living conditions", it was identified that 50% (N = 22) of the municipalities revealed strategies, of which 86.4% (N = 19) presented a strategy in this field. Regarding the dimension "health and nutrition", it was observed that 11.4% (N = 5) of the investigated municipalities presented strategies aimed at guaranteeing FNS, and 60% (N = 3) of these adopted a strategy in this dimension (Figure 1).

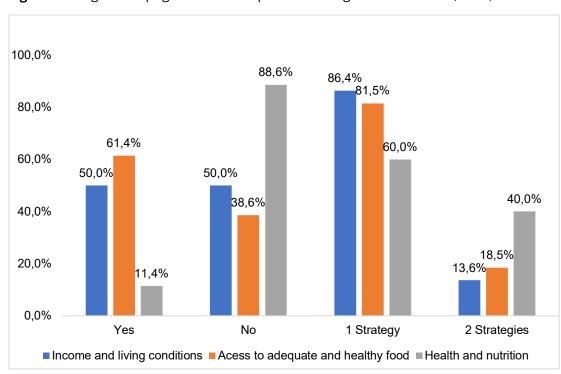
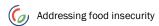


Figure 1. Strategies for coping with AI in municipalities according to SAN dimensions, Bahia, 2020.

Source: elaborated by the authors (2021).



DISCUSSION

This study allowed identifying the strategies adopted by executives from 44 municipalities in Bahia to cope with FNI in the context of the Covid-19 pandemic. The results indicated that most strategies were related to the dimensions "income and living conditions" and "access to adequate and healthy food".

In the dimension "income and living conditions", the actions of tax exemption – such as the extension of term and discount on the payment of the IPTU, permit, and municipal licenses granted by the government – were essential to minimize the economic damage due to the pandemic.

In addition to these strategies, states and municipalities began to regulate the measure that passed two essential laws to minimize the problems of the pandemic. Law No. 3,641/2020 established the exemption from paying the electricity bill between July 1 and December 31, 2020, for consumers receiving the Social Electric Energy Tariff (TSEE).²⁰ Law No. 23,812/2020²¹ exempted the families receiving the Social Tariff of the Bahia Water and Sanitation Company (EMBASA) for three months from the collection of water consumption equal to or less than ten cubic meters (m³) for the holders of the account that were beneficiaries of the *Bolsa Família* (Family aid) Program (BFP).

These actions were essential to diminish the vulnerability of low-income and unemployed families whose income was compromised, requiring additional financial resources to meet other basic needs essential for their livelihood.

Among the strategies for coping with FNI in municipalities of Bahia related to access to healthy eating, there are: the distribution of staple food baskets for vulnerable populations, the supply of foodstuffs distributed in the form of kits or cards to parents or guardians of students, and access to the popular restaurant.

The delivery of staple food baskets is a way to meet the food demand of vulnerable families and the student-oriented card/food stamps. The latter is a means considered sovereign because apparently, the beneficiaries start to have more autonomy in the choice of food, especially with the inclusion of fresh foods, the unlike delivery of kits, which are composed of predominantly industrialized foods.²¹

Concerning actions aimed at beneficiaries of the National School Food Program (PNAE), Amorim, Júnior and Bandoni²³ demonstrated the main actions and strategies to combat hunger and combat FNI that was and should be implemented during and after the pandemic. Among the actions to combat hunger and FNI of the students, the weekly or monthly distribution of food kits and/or meals for schoolchildren predominated, registration for the provision of emergency assistance, expansion of the amount passed on according to the low or very low MHDI, promotion, and maintenance of the acquisition of food from family agriculture.

The popular restaurants, when present in the municipality, become a low-cost alternative to the food needs of vulnerable populations. They have organized quickly to meet hygienic and sanitary guidelines and thus maintain their operation.¹⁰

A case study conducted in the state of Rio Grande do Norte demonstrated the necessary actions of FNS in the face of the pandemic in the 54 popular restaurants in 34 municipalities. The main actions implemented were: ensuring access, ensuring supply, and maintaining quality through the adequacy of opening hours, registration and control of entry in queues, and exemption from the amount paid of people in street situations. There was also adequacy of the menus, distribution of marmites in disposable containers, food supply with a lower proportion of contamination, and meeting all hygienic and sanitary conditions.¹⁷

A low percentage of strategies aimed at access to the popular restaurant was identified in this study. Such strategies are essential to ensure the supply and access to quality food, in sufficient quantities, at affordable prices, or even exempt from amounts paid by the population that most needs food assistance. It is emphasized that among the 17 municipalities

that meet the requirement of 100.000 or more inhabitants for implementing popular restaurants, these are installed in only six.

As important as economic access through the establishment of family income for food acquisition, physical access is paramount to the availability of food for acquisition. The need for distancing and social isolation recommended by states and municipalities tends to affect the supply of fresh and minimally processed food, especially those from family farming, which has lost commercialization space in restaurants, markets, free fairs, or even the PNAE.¹⁰

With the temporary interruption, although partial, to adapt the sanitary conditions of the operation of trade and free fairs, there was a reduction in demand and instability in prices, negatively affecting food supply. There was a commitment to the commercialization of family agriculture, harming not only the production chains but also the economy and the FNS of the municipalities.²⁴

In addition, supermarkets have also suffered supply impacts. Some strategies initiated to mitigate such impacts, such as online sales of products and home delivery, have ended up being ineffective due to infrastructure, logistics, and market access, among other issues.²⁵ Other emergency actions implemented during the pandemic to minimize the effect of the food supply crisis include expanding production, income generation, access to financial resources, and technical training for family farming.²⁶

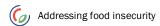
The commercialization of family farming through the interruption of free fairs and purchases for public schools through the PNAE had adverse effects on the production chain and the promotion of FNS and the local economy. Law No. 11.947;2009²⁷ determines that at least 30% of the amount passed on to states, municipalities, and the Federal District by the National Fund for Education Development (FNDE) for the PNAE must be used in the purchases of foodstuffs directly from family farming and the rural family entrepreneur, through the Food Acquisition Program (FAA). This policy plays a crucial role in the supply of food in schools that promote healthy eating habits and benefit the population that needs food assistance through donations.

In addition to the difficulties inherent in the pandemic, since 2016, Brazil has been dismantling social policies promoting the FNS through cuts and freezing of primary resources of the Union,¹⁰ in particular through constitutional amendment 95, approved in 2016, which instituted a new tax regime within the fiscal budgets and social security of the Union and that will be in force for twenty years.²⁸ There is currently a transparent process of unaccountability and limitations of the current government, whose priorities may not be focused on combating hunger and promoting the FNS. This history precedes the Covid-19 pandemic.

In early 2019, the government initiative changed the provisions of the Organic Law on Food and Nutrition Security (LOSAN), extinguishing CONSEA, an essential instrument of articulation between government and civil society to promote strategies and policies that guarantee the Human Right to Adequate and Healthy Food (DHAA). With this, the 6th National Conference on Food and Nutrition Security was not convened, and a positive cycle of auscultation to society was interrupted to define policies of interest to the FNS in the country.²⁹

The reflections of an agenda that is not focused on combating hunger can be proven in the data from the Family Budget Survey (POF) of 2017-2018, the last nationwide study conducted by IBGE on the situation of FNS in Brazil. It reveals a transition in the food situation of the Brazilian population, possibly associated with this dismantling: decrease in FNS and concomitant increase in FNI in all its degrees, the prevalence of severe FNI, an indicator of hunger, is alarming.¹²

Data from the national survey of the PENSSAN Network, which evaluated FNI in the context of the Covid-19 pandemic in Brazil, indicate that 58.7% of Brazilians are in a situation of FNI, and 15.5% live with hunger. Specifically, in the Northeast Region, severe FNI was 21%. These unequal results express relevant political, social, and economic differences between states and municipalities.¹³



In addition, some population groups more vulnerable to the economic crisis and increased social inequality – such as the homeless population, black, indigenous and riverside populations, informal market workers, and the unemployed – had their incomes compromised during the pandemic, contributing to a higher incidence of Covid-19.¹⁰

Gender, race, and class markers are most affected by Covid-19 exposure. Men and women, black and brown, with a low level of education, associated with extreme poverty and homeless population are more conducive to non-compliance with hygienic and sanitary standards. It happens because they live in constant social vulnerability, are socioeconomically disadvantaged, unemployed, and/or casual workers, have low pay and generally do not practice social isolation.³⁰

In this perspective, despite the importance of welcoming the homeless population of extreme vulnerability, few municipalities studied have developed reception strategies for it. People living on the streets are more exposed to diseases due to lack of access to health services, being historically devoid of access to social policies, and violation of human rights. In Salvador, Technical Note No. 4/2020 guided how professionals should proceed and facilitate access for homeless people to health care in the face of the Covid-19 pandemic.³¹

Welcoming and offering assistance to the homeless population becomes even more critical during the pandemic, as it presents a higher risk of contagion, and these people are more exposed to risk factors, including alcohol, drug, and irregular feeding, which may aggravate covid-19.²⁵

The various dimensions included in the FNS, to ensure an adequate and healthy diet for the population, tend to be also affected by the Covid-19 pandemic in its different contexts. Therefore, it is worrying the high percentage of municipalities in this study that implemented a single strategy to cope with FNI in the context of the pandemic, considering that the FNS is by intersectoral definition and demands actions to be carried out both in the nutritional and food spheres, together with the promotion of access to other human rights, DHAA is actually fully achieved.

It should be considered that it was not the object of this study to identify the effectiveness and sustainability of the strategies adopted in the municipalities. As a result, it is not possible to affirm that municipalities that have adopted only one strategy have had less success in coping with FNI.

Providing conditions for the population to obtain income and acquire food is paramount in this pandemic context. This happens mainly due to the high number of workers who have lost their jobs or had their way of work interrupted by the new social dynamics of distancing or social isolation, or even *the lockdown*, with their income interrupted.³³

This set of necessary actions culminated in the highest historical rates of unemployed people seeking employment in the country, with Bahia having the highest unemployment rate (20.7%).³³ This study identified that few municipalities instituted financial aid for the vulnerable population, which may have occurred due to the Emergency Aid provided by the Federal Government until December 2020.^{34,35}

It was also observed, in this study, that only one municipality promoted a strategy to encourage the strengthening of local commerce. Thus, it was considered worrisome since consumers' habits changed due to distancing and social isolation. By avoiding physical stores, these increased *online* shopping, generating a collapse in small businesses and businesses responsible for more than half of the formal jobs in the country.^{36,37} Thus, not only do consumers play an important role in supporting local trade, but the government must implement social protection policies that drive this trade, helping them to reduce the impacts caused by the pandemic.

Actions to cope with the consequences of the pandemic are necessary since the populations that are currently in greater social vulnerability already accumulated history of weaknesses related to the FNS, and the context of the pandemic further highlights the need for social protection through governmental actions.²⁵

Limitations of this study are the fact that some strategies, mainly related to the dimensions "food production and availability" and "education", may have been adopted by the citizens. However, by their nature, these actions are not commonly recorded in the Official Diaries of the municipalities.

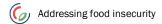
CONCLUSION

This study revealed low coverage of the strategies employed by Bahian municipal executives to cope with FNI in the population during the Covid-19 pandemic. The strategies were more directed to the dimensions of "income and living conditions" and "access to adequate and healthy food".

In an emergency situation such as the current one, rapid and effective short, medium, and long-term measures in these different contexts must be implemented. It is necessary to health up vieses that put the population at greater risk of FNI, especially those with greater social vulnerability. Among them it is possible to mention the continuity of social programs, especially FNS programs, and the implementation of relevant emergency measures to mitigate social and economic impacts during and after the pandemic.

REFERENCES

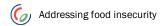
- 1. Yuen KS, Ye ZW, Fung SY, Chan CP, Jin DY. SARS-CoV-2 and COVID-19: The most important research questions. Cell Biosci. 2020 mar;10:40. https://doi.org/10.1186/s13578-020-00404-4
- 2. Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, et al. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. Lancet. 2020 Feb;395(10224):565-574. https://doi.org/10.1016/S0140-6736(20)30251-8
- **3.** World Health Organization. WHO Director-General's statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV). 2020 Jan [acessado 2021 Abr 20]. Disponível em: https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-(2019-ncov).
- **4.** West R, Michie S, Rubin GJ, Amlôt R. Applying principles of behaviour change to reduce SARS-CoV-2 transmission. Nat Hum Behav. 2020 May;4:451–459. https://doi.org/10.1038/s41562-020-0887-9
- **5.** Aquino EML, Silveira IH, Pescarini JM, Aquino R, Souza-Filho JA, Rocha AS et al. Medidas de distanciamento social no controle da pandemia de COVID-19: potenciais impactos e desafios no Brasil. Ciênc. saúde coletiva. 2020 Jun; 25(Suppl 1):2423-2446. https://doi.org/10.1590/1413-81232020256.1.10502020
- **6.** Silva TC, Anghinoni L, Zhao L. Quantitative Analysis of the Effectiveness of Public Health Measures on COVID-19 Transmission. Medrxiv. 2020 May;1-26. https://doi.org/10.1101/2020.05.15.20102988
- 7. Anderson RM, Heesterbeek H, Klinkenberg D, Hollingsworth TD. How will country-based mitigation measures influence the course of the COVID-19 epidemic? Lancet. 2020 Mar; 395(10228):931-934. https://doi.org/10.1016/S0140-6736(20)30567-5
- **8.** Nicola M, Alsafi Z, Sohrabi C, Kerwan A, Al-Jabir A, Iosifidis C, Agha M, Agha R. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. Int J Surg. 2020 Jun;78:185-193. https://doi.org/10.1016/j.ijsu.2020.04.018
- **9.** Costa SS. Pandemia e desemprego no Brasil. Rev Adm Púb. 2020 Jul;54(4):969-978. http://dx.doi.org/10.1590/0034-761220200170
- **10.** Ribeiro-Silva RC, Pereira M, Campello T, Aragão E, Guimarães JMM, Ferreira AJF, Barreto ML, Santos SMC. Implicações da pandemia COVID-19 para a segurança alimentar e nutricional no Brasil. Ciênc Saúde Colet. 2020 Set;25(9):3421-3430. https://doi.org/10.1590/1413-81232020259.22152020



- **11.** Brasil. Lei nº 11.346, de 15 de Setembro de 2006. Cria o Sistema Nacional de Segurança Alimentar e Nutricional SISAN com vistas em assegurar o direito humano à alimentação adequada e dá outras providências. Diário Oficial da União 2006; 15 set.
- **12.** Instituto Brasileiro de Geografia e Estatística. Pesquisa de orçamentos familiares 2017-2018: análise da segurança alimentar no Brasil. Rio de Janeiro: IBGE Coordenação de Trabalho e Rendimento; 2020.
- **13.** Rede Brasileira de Pesquisa em Soberania e Segurança Alimentar e Nutricional. VIGISAN: II Inquérito Nacional sobre Insegurança Alimentar no Contexto da Pandemia da Covid-19 no Brasil. Rede PENSSAN; 2022.
- **14.** Instituto Brasileiro de Geografia e Estatística. Pesquisa Nacional por Amostra de Domicílios 2013: segurança alimentar. Rio de Janeiro: IBGE Coordenação de Trabalho e Rendimento; 2014.
- **15.** Fundação Getúlio Vargas. A Escalada da Desigualdade Qual foi o Impacto da Crise sobre Distribuição de Renda e Pobreza?. FGV Social; 2019.
- **16.** Castro IRR. A extinção do Conselho Nacional de Segurança Alimentar e Nutricional e a agenda de alimentação e nutrição. Cad. Saúde Pública. 2019;35(2):e00009919. https://doi.org/10.1590/0102-311X00009919
- **17.** Araújo FR, Calazans DLMS. Gestão das ações de Segurança alimentar e nutricional frente a pandemia pela Covid 19. Rev Adm Púb. 2020 Jul/Ago;54(4):1123-1133. http://dx.doi.org/10.1590/0034-761220200329
- **18.** World Health Organization. Who Director-General's opening remarks at the media briefing on COVID-19 11 March 2020. [acessado 2021 Abr 20]. Disponível em: https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020
- **19.** Grupo Governamental de Segurança Alimentar e Nutricional. Diagnóstico da Segurança Alimentar e Nutricional do Estado da Bahia. GGSAN; 2015.
- **20.** Brasil. Câmara dos Deputados. Proposta prorroga isenção da conta de luz para consumidor de baixa renda. [acessado 2021 Abr 25]. Disponível em: https://www.camara.leg.br/noticias/673826-proposta-prorroga-isencao-da-conta-de-luz-para-consumidor-de-baixa-renda/.
- **21.** Assembleia Legislativa do Estado da Bahia. PL./23.182/2020. [acessado 2021 Abr 25]. Disponível em: https://www.al.ba.gov.br/atividade-legislativa/proposicao/PL.-23.812-2020.
- **22.** Portal RD, Vieira ICG, Canto O. Alimentação escolar no contexto da pandemia COVID-19 nas Instituições Federais de Ensino da Região Metropolitana de Belém/Pará. Agricultura Familiar: Pesquisa, Formação e Desenvolvimento. 2021 Jan-Jun;15(1):175-195.
- **23.** Amorim ALB, Ribeiro Junior JRS, Bandoni DH. Programa Nacional de Alimentação Escolar: estratégias para enfrentar a insegurança alimentar durante e após a COVID-19. *Rev Adm Púb*. 2020 Jul/Ago;54(4):1134-1145. https://doi.org/10.1590/0034-761220200349
- **24.** Sambuichi RHR, Almeida AFCS, Perin G, Spínola PAC, Pella AFC. O Programa de Aquisição de Alimentos (PAA) como estratégia de enfrentamento aos desafios da COVID-19. Rev Adm Púb. 2020 Jul/Ago;54(4):1079-1096. https://doi.org/10.1590/0034-761220200258
- **25.** Buanango MA, Galesi-Pacheco LF, Ramirez YPG, Costa CA, Santos JS, Loura AP, Vieira CM. Segurança Alimentar e Nutricional em tempos de COVID-19: impactos na África, América Latina e Portugal. Rev Simbiologias. 2020;12(16):100-117.
- 26. Confederação Nacional da Agricultura e Pecuária. Boletim CNA: Impacto do Coronavírus. [acessado 2021 Abr 29]. Disponível em: https://www.cnabrasil.org.br/noticias/boletim-cna-impacto-do-coronavirus#:~:text=Bras%C3%ADlia%20(21%2F03%2F2020,o%20cen%C3%A1rio%20interno%20e%20externo.

27. Brasil. Lei nº 11.947, de 16 de Junho de 2009. Dispõe sobre o atendimento da alimentação escolar e do Programa Dinheiro Direto na Escola aos alunos da educação básica. Diário Oficial da União 2009; 16 Jun.

- **28.** Brasil. Emenda Constitucional nº 95, de 15 de Dezembro de 2016. Altera o Ato das Disposições Constitucionais Transitórias, para instituir o Novo Regime Fiscal, e dá outras providências. Diário Oficial da União 2016; 15 Dez.
- **29.** Ramos FP, Santos SMC. Conferências Nacionais de Segurança Alimentar e Nutricional e a conformação de uma arena de ação: a perspectiva de atores participantes. Res, Social and Developm. 2020;9(11):e99991110686. http://dx.doi.org/10.33448/rsd-v9i11.10686
- **30.** Estrela FM, Soares e Soares CF, Cruz MA, Silva AF, Santos JRL, Moreira TMO, Lima AB, Silva MG. Pandemia da Covid 19: refletindo as vulnerabilidades à luz do gênero, raça e classe. Ciênc. saúde coletiva. 2020 Set;25(9):3431-3436.
- 31. Prefeitura de Salvador. Secretaria Municipal de Saúde. Nota Técnica DAS/APS Novo Coronavírus N° 04/2020, de 09 de abril de 2020. Orientações para organização da Atenção Primária à Saúde Consultórios de Rua no enfrentamento ao novo Coronavírus (COVID-19) no município de Salvador. [acessado 2021 Mar 05]. Disponível em: http://www.saude.salvador.ba.gov.br/covid/wp-content/uploads/sites/27/2020/08/Nota-T%C3%A9cnica-04.2020-POP-RUA_09.04.pdf.
- **32.** Bezerra ACV, Silva CEM, Soares FRG, Silva JAM. Fatores associados ao comportamento da população durante o isolamento social na pandemia de COVID-19. Ciênc. saúde coletiva. 2020 Jun;25(Suppl 1):2411-2421.
- **33.** Instituto Brasileiro de Geografia e Estatística. Desemprego chega a 14,6% no terceiro trimestre, com alta em 10 estados. [acessado 2021 Abr 25]. Disponível em: https://agenciadenoticias.ibge.gov.br/agencianoticias/2012-agencia-de-noticias/noticias/29520-desemprego-chega-a-14-6-no-terceiro-trimestre-com-alta-em-10-estados.
- **34.** Brasil. Lei nº 13.982, de 2 de Abril de 2020. Altera a Lei nº 8.742, de 7 de dezembro de 1993, para dispor sobre parâmetros adicionais de caracterização da situação de vulnerabilidade social para fins de elegibilidade ao benefício de prestação continuada (BPC), e estabelece medidas excepcionais de proteção social a serem adotadas durante o período de enfrentamento da emergência de saúde pública de importância internacional decorrente do coronavírus (Covid-19) responsável pelo surto de 2019, a que se refere a Lei nº 13.979, de 6 de fevereiro de 2020. Diário Oficial da União 2020; 02 Abr.
- **35.** Brasil. Medida Provisória nº 1.000, de 2 de Setembro de 2020. Institui o auxílio emergencial residual para enfrentamento da emergência de saúde pública de importância internacional decorrente do coronavírus (covid-19) responsável pelo surto de 2019, a que se refere a Lei nº 13.979, de 6 de fevereiro de 2020. Diário Oficial da União 2020; 02 Set.
- **36.** Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. Comprador do comércio local durante a crise é bom para todos. [acessado 2021 Abr 25]. Disponível em: https://m.sebrae.com.br/sites/PortalSebrae/ufs/pb/artigos/comprar-do-comercio-local-durante-crise-e-bompara-todos,fedf0fd17ef41710VgnVCM1000004c00210aRCRD.
- **37.** Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. Estudo mostra novo comportamento do consumidor diante da pandemia. [acessado 2021 Abr 25]. Disponível em: https://www.sebrae.com.br/sites/PortalSebrae/artigos/estudo-mostra-novo-comportamento-do-consumidor-diante-da-pandemia,9388ad41eab21710VgnVCM1000004c00210aRCRD.



Contrubutors

Santana JM, Queiroz VAO, and Fonseca NSS, contributed to the conception and design, analysis and data interpretation, writing of the article, revision, and approval of the final version; Anjos CN contributed to the writing and formatting of the article, review, and approval of the final version. Freitas PR and Souza DA contributed to the article's writing, review, and approval of the final version. Santos SMC contributed to the final version's guidance, revision, and approval.

Conflict of Interest: The authors declare no conflict of interest.

Received: August 26, 2021 Accepted: July 13, 2022