

SARS-COV-2 pandemic: the food insecurity and social inequalities in Brazil

Pandemia de SARS-COV-2: a insegurança alimentar e as desigualdades sociais no Brasil

Pandemia de SARS-COV-2: inseguridad alimentaria y desigualdades sociales en Brasil

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ABSTRACT

The COVID-19 pandemic has resulted in the most severe global public health crisis in the last century. SARS-CoV-2 emerged in China in December 2019, and since then, it has been quickly spreading around the world. After Europe and North America, the virus has arrived in Latin America. Among the developing countries, Brazil has been the most affected by the pandemic casualties, which is a concern, since social and economic disparities may favor its severity. In an attempt to reduce virus transmission, public health measures have been implemented by the states, despite the lack of assistance from the Brazilian federal government. Implementing social distancing and hygiene measures have not been possible, mainly due to the unfavorable social conditions of economically vulnerable people. Thus, the pandemic is exposing the evidence of social inequalities in the country, which in turn deepens the public health crisis. Here, we discuss evidence from relevant topics that are influencing the course of the pandemic in Brazil, including food insecurity, social aspects and public health political issues. The pandemic has exposed the need for maintaining and improving the social care and food security of vulnerable groups as well as the harm of ignoring them. Thus, more effective mitigation measures must be thought and applied in Brazil to improve the handling of this pandemic and the next ones.

Keywords: COVID-19; pandemic; food security; equity; health policies.

RESUMO

A pandemia COVID-19 resultou na mais grave crise de saúde pública global do século passado. O SARS-CoV-2 surgiu na China em dezembro de 2019 e, desde

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então, tem se espalhado rapidamente pelo mundo. Depois da Europa e da América do Norte, o vírus chegou à América Latina. Entre os países em desenvolvimento, o Brasil tem sido o mais afetado pelas causalidades da pandemia, o que é preocupante, uma vez que as disparidades sociais e econômicas podem favorecer sua gravidade. Na tentativa de reduzir a transmissão do vírus, medidas de saúde pública têm sido implementadas pelos estados, apesar da falta de assistência do governo federal brasileiro. A implementação de medidas de distanciamento social e higiene, não tem sido possível, principalmente devido às condições sociais desfavoráveis de pessoas economicamente vulneráveis. Desta forma, a pandemia vem expondo as evidências das desigualdades sociais no país o que, por sua vez, aprofunda a crise de saúde pública. Aqui, discutimos evidências de tópicos relevantes que estão influenciando o curso da pandemia no Brasil, incluindo insegurança alimentar, aspectos sociais e questões políticas de saúde pública. A pandemia expôs a necessidade de manter e melhorar a assistência social e a segurança alimentar de grupos vulneráveis, bem como o dano de ignorá-los. Assim, medidas de mitigação mais eficazes devem ser pensadas e aplicadas no Brasil para melhorar o manejo desta pandemia e das próximas.

Palavras-chave: COVID-19; pandemia; comida segura; equidade; políticas de saúde.

RESUMEM

La pandemia de COVID-19 resultó en la crisis de salud pública mundial más grave del siglo pasado. El SARS-CoV-2 surgió en China en diciembre de 2019 y desde entonces se ha extendido rápidamente por todo el mundo. Después de Europa y América del Norte, el virus llegó a América Latina. Entre los países en desarrollo, Brasil ha sido el más afectado por las víctimas de la pandemia, lo que es preocupante, ya que las disparidades sociales y económicas pueden favorecer su gravedad. En un intento por reducir la transmisión del virus, los estados han implementado medidas de salud pública, a pesar de la falta de asistencia del gobierno federal brasileño. La implementación de medidas de distanciamiento social e higiene no ha sido posible, principalmente debido a las desfavorables condiciones sociales de las personas económicamente vulnerables. Así, la pandemia ha dejado al descubierto la evidencia de las desigualdades sociales en el país, lo que a su vez profundiza la crisis de salud pública. Aquí, discutimos evidencia de temas relevantes que están influyendo en el curso de la pandemia en Brasil, incluida la inseguridad alimentaria, los aspectos sociales y las cuestiones de política de salud pública. La pandemia expuso la necesidad de mantener y mejorar la asistencia social y la seguridad alimentaria para los grupos vulnerables, así como el daño de ignorarlos. Por lo tanto, se deben diseñar y aplicar medidas de mitigación más efectivas en Brasil para mejorar la gestión de esta y la próxima pandemia.

Palabras clave: COVID-19; pandemia; comida segura; políticas de salud.

Introduction

The recent emergence of a novel coronavirus named SARS-CoV-2 in December 2019 in Wuhan (province of Hubei, China) and its worldwide spread has led to an unprecedented global health crisis in this century. SARS-CoV-2 is a bat-origin coronavirus that acquired the ability of a sustained human to human transmission either directly or through an intermediate animal host ⁽¹⁾. SARS-CoV-2 is the underlying agent of coronavirus disease 2019 (COVID-19). This illness can lead to severe respiratory outcomes in at least 20% of the infected patients ⁽²⁾.

In August 29, 2020, more than 25,354,533 cases of COVID-19 and 849,605 deaths have been reported in 188 countries around the world. The United States of America has the highest cases confirmed, followed by Brazil, India, Russia, and Peru. Absolute case numbers need to be interpreted with caution since COVID-19 testing policies vary among countries. For instance, whereas the USA tests 246,779 people per million, Brazil tests 67,444 tests/million people, which is the lowest testing rate among the most affected countries ⁽⁴⁾. In Brazil, the knowledge of the real case number is a challenge because of the lack of early and rapid identification of suspect cases, which are essential to reduce viral spread. Thus, effective COVID-19 control in Brazil is being hampered by the paucity of testing ⁽⁵⁾.

The rapid dissemination of SARS-CoV-2 in Brazil has revealed the need to understand the population behavior during a pandemic. Social, political, and cultural features influence people's actions, and the adherence to the sanitary measures taken to control virus spread ⁽⁶⁾⁽⁷⁾. Hence, depending on the context, specific measures implementation aiming to reduce virus spread can be thought, which will be discussed below.

In this context, the social inequality in Brazil impacts many aspects of public health, such as the hunger and food/nutritional insecurity, which are increasing due to the pandemic ⁽⁸⁾. Additionally, the weakness in convergent political decisions related to the containment of the virus and the inefficiency of measures at the social level has been a concern ⁽⁹⁾.

Here, we aim to discuss the social inequalities, the food insecurity issues, and the current political scenario implications during the SARS-CoV-2 pandemic in Brazil, which are leading to this sanitary and humanitarian crisis.

Development

The social context of vulnerable groups in Brazil

The rapid increase of cases in Brazil suggests that the effectiveness of preventive measures applied against the pandemic progress needs to be analysed ⁽¹⁰⁾. Virus transmission is easier in closed spaces and when social distancing is not followed, favouring contaminated droplets transfer ⁽¹¹⁾. In Brazil, the virus comes across a specific socio-spatial reality: the country has a high population density (estimated at 211 million inhabitants) and poor housing conditions, mainly in peripheries around urban centers, indicating its unique vulnerabilities ⁽¹²⁾.

The population density, especially in urban centers with overcrowded houses and the lack of sanitation, garbage collection, and safe housing, may be one of the influencers for rapid dissemination of pathogens. People living in *favelas* (around 13 million people, 6% of the Brazilian population) and informal settlements strongly face higher risks of morbidity and mortality during a pandemic ⁽¹³⁾. According to the Brazilian Institute of Geography and Statistics, in 2017, only 38.2% of Brazilian cities had a Municipal Basic Sanitation Policy ⁽¹⁴⁾. The lack of this essential service prevents the adoption of individual and collective hygiene measures recommended to reduce the transmission of the virus. In the Brazilian *favelas*, it is not uncommon to find 7-10 people living in a single 15 m² shack, which makes implementing social distancing an unrealistic task.

Major global crises affect people living on the streets and *favelas* more strongly, showing a tendency to increase the number of people in social vulnerability. In Brazil, statistical data about the homeless population is sporadic and has low accuracy, which demonstrates their social invisibility within the scope of social policies. The last data from the Institute of Applied Economic Research in 2016 reported that Brazil had more than 100.000 people living on the streets ⁽¹⁵⁾. It is nearly impossible for homeless people to follow hygiene measures and stay isolated, increasing their exposure to the virus and their vulnerability to infection ⁽¹⁶⁾.

Previous pandemics such as influenza showed that the racial and ethnic minority populations experience worse health outcomes than other groups do not only during disasters but also after them ⁽¹⁷⁾. Another example of social disparity in Brazil is amongst the indigenous population that has been continuously under threat,

which aggravated with the present pandemic. The current government has been ignoring their lifestyle or even encouraging illegal mining in the Amazon rainforest ⁽¹⁸⁾, which is an extra concern. These disparities urge us to reevaluate the planned actions to guarantee that the entire population has the right to preventive and safety measures to protect them against the new coronavirus.

Major global crises affect people living on the streets and favelas more strongly, thus for many Brazilians, food insecurity is already present and the current pandemic may further aggravate this situation. Informal workers have already felt the economic effects generated by the pandemic as well as wage earners with reduced working hours and possible layoffs, making access to healthy food even more difficult. The miserability of people who suffer from basic material needs cannot be left aside, It is the responsibility of the State to provide social assistance to strengthen the fight against the pandemic and make vulnerable groups gain access to social justice ⁽¹⁹⁾⁽²⁰⁾.

The investigation about who is potentially vulnerable during a pandemic leads to ways of understanding who may suffer higher risks of being affected ⁽²¹⁾. Unfortunately, maintaining social distancing while working from home as well as following up all the sanitary recommendations are not a reality for everybody. This is aggravated for people who live in poor conditions if the government does not provide them the fundamental rights.

Food insecurity and public policies in the context of SARS-CoV-2 pandemic in Brazil

Food and nutritional security can be defined as the right to quality food in sufficient quantity without compromising access to other essential needs, respecting cultural diversity and being environmentally, economically, and socially sustainable ⁽²²⁾. The complexity of this definition shows the holistic vision of food security that not only refers to the availability and supply of food but also food production, the quality of food, and the environmental impact for its production, assembling as a part of the health system.

The spread of SARS-CoV-2 is connected with pre-established vulnerabilities in society, mainly in developing countries. One of the most significant impacts of the pandemic is the increase of food insecurity and hunger for vulnerable groups. To prevent this, public health policies that guarantee food security need to be increased, valued and implemented ⁽⁸⁾⁽²³⁾.

In Brazil, the pandemic has already exacerbated the food insecurity in its broad concept ⁽²⁴⁾. In peripheral communities for example, there are high unemployment rates, lack of opportunities, and informal employment, with low and irregular wages. This leads to the inability to purchase food, leading to food and nutritional insecurity ⁽²⁵⁾.

In this context, there is a tendency to increase the number of people invisible to social policies, including the homeless population. This represents the need to reorganize the actions that guarantee the entire population the right to health as a form of protection against the new coronavirus ⁽²⁶⁾.

Therefore, how is it possible to guarantee a healthy diet for all citizens in the context of the increased vulnerability? To establish a system that allows continuous access to food, it is crucial to see the Food and Nutrition Security as a human right. The Human Right to Adequate Food is contemplated in article 6 of the Brazilian Federal Constitution as a social and fundamental right. It consists of the physical and economic access of all people to food and resources, such as employment or land, and ensuring continuous access to it ⁽²⁷⁾. Therefore, it is necessary to promote and ensure food policy actions based on effective planning, which are intrinsically associated with public health and social inequalities ⁽²⁸⁾.

Aiming to reduce food insecurity and hunger in Brazil, specific social programs were firstly organized under the named Zero Hunger strategy ⁽²⁹⁾, which includes a variety of actions regarding production, access, and distribution of food as well as the consumption of quality diets ⁽²³⁾. Within this Program, the “Family Grant Program” (Programa Bolsa Família - PBF) has been the most well-established approach in combating hunger in Brazil, which consists of an income transfer program implemented in 2004, with more than 13 millions of beneficiated families ⁽³⁰⁾. This action is a recognized attempt that improves income and food access, minimalizing food insecurity, and regional inequalities ⁽³¹⁾⁽³²⁾.

Brazil has been working on food policies for more than two decades, promoting outstanding progress on the Human Right to Food ⁽³³⁾. However, the current government has been aimed to dismantle the instruments of food security policy implemented by previous governments. The first measure taken was the extinction of the National Council for Food and Nutrition Security (CONSEA), which was a national instance of social control for the production of healthy and pesticide-free food, responsible for advising the president on food security issues ⁽³³⁾⁽³⁴⁾. Implemented in 2003, CONSEA performed a central role in the institutionalization of food and nutrition security policy in Brazil ⁽²³⁾. This was a critical turning point into an escalating situation regarding this pandemic crisis because CONSEA was the sole institutionalized public policy that promoted the Human Right to Adequate Food in Brazil.

The Brazilian Federal Constitution (1988) ⁽²⁴⁾, along with Federal Law 8080, implements the Brazilian National Health System (BNHS - SUS), which ensures health as a right of the population and duty of the State. This statement is directly related to the broad concept of health, which includes the commitment to the food and nutrition of citizens. Thus, the Social Assistance Policies are considered the most effective strategies to deal with a large portion of the population in vulnerable conditions during a pandemic. This may ensure food security, which is the government's co-responsibility ⁽³⁵⁾. In the meantime, especially during a pandemic, the food security policies need to enhance their actions, and the civil society groups must also be engaged in maintaining and improving the social programs in Brazil.

Emergency aid to those affected by the pandemic

In order to face the economic effects of the COVID-19 pandemic, an emergency aid of R\$ 600 equivalent to U\$ 111,27 to low-income workers, or R\$1200 (U\$ 222,54) in the case of single mothers, was sanctioned by Law 13.982.

Initially, the resource was supposed to aid 54 million people, just over 25% of the Brazilian population, however, according to the IBGE's National Household Sample Survey ⁽³⁶⁾, in July, 44.1% of Brazilian households received it to supplement

income. In the same period, about 4.4 million households were maintained, only by such income ⁽³⁶⁾.

Initially, the benefit would cost the federal government about R\$ 98 billion equivalent to U\$ 18.17 billion in three months. Subsequently, an extension of five months was granted and its cost was increased to R\$ 254.4 billion about U\$47.18 billion bilion. It is also expected that the emergency aid will be extended until December 2020, with an expected reduced amount from R\$ 600 to R\$ 300 (from U\$ 111,27 to U\$ 55,64) per person, which would have a monthly cost of R\$ 25 billion (U\$ 4.64 billion) ⁽³⁷⁾.

It is worth mentioning that theoretically the vulnerable population is the same that would only be able to comply with isolation measures and social distancing if they count on the income from the aid. The objective of the grant is to guarantee the minimum existential for this population, thus representing a tool in combating food insecurity during the COVID-19 pandemic.

The National Program for School Feeding as a strategy to combat food insecurity during COVID-19 pandemic

The National Program for School Feeding (NPSF - PNAE) represents one of the most important policies aimed at ensuring food security in Brazil. The right to school feeding is supported by the Constitution, which defines that the three levels of government (Federal, State and Municipal) are responsible for assuring this right ⁽³⁸⁾. Currently, the program serves approximately 42 million students, in 160,000 basic education schools in the country and contributes to the biopsychosocial growth and development, learning, school performance and the formation of healthy eating habits of students ⁽³⁹⁾.

At this time, the suspension of classes in public schools meant precarious access to food. Due to the confrontation of the COVID-19 pandemic, NPSF faces a major challenge to continue with the provision of school meals ⁽³⁹⁾.

NPSF plays a crucial role in combating food insecurity and hunger during the pandemic. In this context, the National Education Development Fund (NEDF - FNDE) authorized, exceptionally, during the period of classes suspension, the distribution of

food purchased with resources from NPSF to the basic education students' families (40).

In addition, FNDE launched a guideline for the execution of the NPSF during the coronavirus pandemic (41). The material provides guidance on the preparation of food kits, including the weekly supply of fresh fruits and vegetables. Since the elaboration of menus is a private activity of the nutritionist, the planning and definition of the foodstuffs that should compose the food kit must be carried out by these professionals.

The booklet also confirms the minimum application of 30% of the program's resources in the acquisition of food from family farming, a measure that, in addition to providing healthy food to students, is also one of the most important commercialization channels for family farming, generating employment and income for thousands of families in rural areas (41).

Conclusion

Social vulnerabilities linked to socioeconomic status and other social stratifications must be taken into account when fighting a global pandemic. In Brazil, the most vulnerable people are showing the weakness of government politics, which is failing to take the proper precautions to mitigate the virus spread and ensure essential laws for food safety. Additionally, vulnerable groups are more susceptible to get severely sick since they are unable to protect themselves through preventive measures in comparison to those privileged populations.

Briefly, implementation of pandemic measures should be urgently optimized in Brazil by (1) efficient preparedness actions that address specific needs of the disadvantaged groups, (2) improvements in public health policies and community health safety systems, (3) social policies that would minimize economic issues and guarantee food security during the isolation and quarantine, and (4) mitigation measures to ensure that proper hygiene habits and physical isolation are being efficiently and humanly implemented for all the population.

Actions such as the provision of emergency aid and the distribution of food kits by the NPSF are tools adopted with the aim of minimizing food insecurity in the face

of the COVID-19 pandemic. Even so, the Brazilian National Health System and the other areas of the social protection system need to act in an articulated manner, ensuring coordinated and centralized actions. Now, more than ever, it is crucial to treat all people in a society as equals, and the actions taken to tackle any pandemic must be done through an equity lens.

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