Factors associated with people's behavior in social isolation during the COVID-19 pandemic

Anselmo César Vasconcelos Bezerra (https://orcid.org/0000-0003-0722-9417) ¹ Carlos Eduardo Menezes da Silva (https://orcid.org/0000-0003-1156-156X) ¹ Fernando Ramalho Gameleira Soares (https://orcid.org/0000-0001-8244-1800) ² José Alexandre Menezes da Silva (https://orcid.org/0000-0003-4603-978X) ³

Abstract This paper presents the results of an opinion poll conducted in Brazil on the perception of social isolation during the COVID-19 pandemic. The questionnaire was prepared on Google Forms, disseminated through social networks, with questions about the socioeconomic profile and factors associated with isolation. A non-probabilistic sample was obtained with 16,440 respondents. Data were analyzed using the Stata 13 software. Social interaction was the most affected aspect among people with higher education and income (45.8%), and financial problems caused a more significant impact (35%) among people with low income and education. Those who practice some physical activity showed lower levels of stress 13%, as well as greater normality in sleep 50.3%. People who reported living in worse habitability conditions reported willingness to remain isolated for less time, 73.9%. Among non-isolated people (10.7% of the total sample), 75.8% believe that social isolation will reduce the number of victims of COVID-19. We conclude, based on this sample, that the perception about social isolation as a pandemic mitigation action varies by income, education, age, and gender. However, most believe that it is the most appropriate control measure and are willing to wait as long as necessary to contribute to the fight against COVID-19.

Key words New Coronavirus, Brazil, Social perception

¹ Instituto Federal de Educação Ciência e Tecnologia de Pernambuco. Av. Prof. Luís Freire 500, Cidade Universitária. 50740-545 Recife PE Brasil. anselmo@recife.ifpe.edu.br ² Instituto Brasileiro de Geografia e Estatística. Rio de Janeiro RJ Brasil. ³ Netherlands Hanseniasis Relief. Fortaleza CE Brasil.

Introduction

In December 2019, China informed the WHO of an outbreak of a new disease, similar to pneumonia. The disease transmitted by the new coronavirus was named COVID-191. In January 2020, new COVID-19 cases were reported outside China², so WHO decided to declare an international public health emergency³. In Latin America, the first recorded case was in São Paulo, Brazil, on February 26, 2020^{4,5}.

After the arrival of COVID-19 in Brazil, several measures to control and prevent the disease were taken by local health authorities in different administrative spheres (federal government, state, and municipal governments). These measures differed from one region to another in the country. However, the most widespread measure by the authorities was social distancing⁶, generally understood by the population and the media as social isolation⁷. Thus, this term was chosen in this research since it is easier for people to understand.

Social isolation has caused many controversies in the country since some authorities are skeptical about its effectiveness7. Most decision-makers have chosen to encourage this measure, adopting strategies to control population mobility, such as the closure of schools and universities, non-essential commerce, and public leisure areas, among others8. As a result, most of the Brazilian population supported and adhered to the social isolation movement9 to fend off COVID-19 and collaborate in mitigating the contagion curve in the country¹⁰.

However, the social isolation process has caused some impacts on people's lives11-13. For this reason, in this research, we sought to understand the main effects of this social isolation, observing the factors that may contribute or hinder this process, but also correlate some socioeconomic characteristics of the population with the factors associated with social isolation.

The research primarily aimed to describe, from the respondents' perception, aspects related to people's behavior, and how they are being affected during the social isolation imposed by the COVID-19 pandemic. The dimensions evaluated considered economic factors (impact on income/ expenditure), health (stress level, physical activity, sleep quality), environmental factors (number of people in the household, perception of comfort in the household, presence of open areas in the household), and the time people are willing to remain in isolation in the context of the pandemic.

The media and common sense are arguing that the number of people with the lowest income implementation of social isolation is low compared to those with the highest income, mainly due to the need to travel to work since the poorest population is linked to essential activities that have not stopped. The population with the highest income is, in general, more linked to activities that have stopped or established remote work. Other factors interfering with social isolation are also questioned by the media and academia, such as, for example, gaps in habitability conditions between people with higher and lower incomes. Thus, the research sought to describe whether these factors are consistent with the population's perception of the social isolation process.

Similar research has already been carried out in other countries. For example, Italy identified that the population is less willing to collaborate with self-isolation if the measures to increase that isolation are extended over time¹⁴. In the United Kingdom, the desire for self-isolation was strong in all social segments. However, low-income people were three times less likely to perform self-isolation¹⁵, especially due to the type of work performed.

In Brazil, some research on social isolation has already been released9,16. Datafolha9 showed that 76% of Brazilians were in favor of isolation at the beginning of April. In the State of Ceará, it became evident that the isolation measures adopted by the population vary by people's income, gender, and education. The research found that young people are more vulnerable to COVID-19 infection, as they are less isolated than older adults16.

Although the results presented in this work reveal only the perception of the survey respondents and not the population as a whole, given the urgency imposed by the pandemic to expand the common knowledge base related to the coping strategies, the considerations presented here may enlighten issues relevant to the design of strategies to reduce potential problems caused by social isolation in different segments of society, emphasizing that the literature points out that social isolation is one of the main non-pharmacological measures to address the COVID-19 pandemic¹⁰.

Methods

It is a cross-sectional study conducted from a questionnaire with seventeen objective questions in the opinion survey format, as per the rules of Resolution 510/16¹⁷. The identification of respondents was not required, and participation was voluntary. The research gathered data among the universe of the Brazilian population, more specifically among the population with some digital equipment with internet access, setting a non-probabilistic sample with convenience bias. The questionnaire was structured into four parts, to identify the maximum amount of data related to the objectives¹⁸.

- 1) Questions regarding the respondents' socioeconomic profile containing the gender, age, state of household, education, and income range variables.
- 2) Questions regarding isolation and its impact on people's lives with the following variables: whether or not in isolation, why not in isolation, what is the main impact of isolation, and how is isolation affecting income/expenditure and health.
- 3) Issues regarding habitability conditions in isolation: number of people in the household, perception of comfort in the household, presence or absence of an open or green area in the household.
- 4) The last question was about people's expectations regarding the maximum time they believe they will endure in social isolation during the pandemic.

The collection instrument was built on the Google® Forms platform and disseminated via the internet through applications and social networks: WhatsApp, Instagram, and Facebook, in the April 6-8, 2020 period. In all, 17,254 responses were obtained from all Brazilian states, with different proportions in the number of respondents. Only responses from people aged 18 or older were considered, reducing the number of observations to 16,440.

The data were tabulated in an Excel spreadsheet and analyzed using the STATA® 13 software. Pearson's Chi-square test, which calculates the value of the chi-square variable and the p-value of that sample, was applied for each relationship between categorical variables. The test checks whether the association between categorical variables, with the possibility of refuting or not the null hypothesis of independence. In this paper, after exploring different variables with different degrees of freedom, a desirable level of confidence of 99% for analyzing the critical value of the chi-square distribution was adopted as a parameter to refute the null hypothesis, which requires a p-value greater than 0.01 (significance level of 1%) to identify an association.

Results

Of the total of 16,440 valid responses in the sample, 69% of the people were female, while 31% were male. Regarding the income brackets, we observed that 34% of the answers were in the range of up to 2 minimum wages, 31% in the range that receives between 2 and 5 minimum wages, 17% receive between 5 and 8 minimum wages and 19% earn above 8 minimum wages.

Regarding education, the research did not target any specific social segment. However, the data revealed a concentration of responses from people with higher education (34%) and postgraduate (52%), while 13% of respondents have high school and 1% elementary school. The mean age range of respondents was 41 years, and the median age was 40 years. The rate of responses increased after the age of 30 and decreased after the age of 55.

In the sampled universe, 32% stated that they are in total isolation, that is, they do not leave their homes; 57% of people are in partial isolation, which means, in this research, that they were leaving home just to buy food and medicines; and 11% do not fit either as isolated or as partially isolated. Overall, 89% of people believe that isolation reduces the number of COVID-19 victims, while 8% are unsure, and only 3% responded that isolation cannot reduce the number of COVID-19 victims.

For 39% of respondents, social interaction is the main aspect that is being affected by isolation. In comparison, 24% of people reported the financial aspect as the most impacting, 19% reported that isolation is not causing any type of impact, 10% pointed to other factors being affected, and only 8% said the main impact was on their health. The factors listed may be interrelated, but the question aimed to understand the main impact, even if someone is affected by more than one factor. We observed that the results show significant differences between the groups for this variable when stratified by income profile.

When asked about the impact of social isolation on people's income/expenditure, the answers were as follows: 32% said that isolation is not affecting income/expenditure, 34% said they were saving money, 13% were spending more money in this period, while 20% said they stopped making money due to social isolation.

When asked whether isolation was causing some stress in the home environment, 27% said they were not experiencing any stress due to isolation, 56% reported feeling a little stress,

and 17% stated that isolation had caused a lot of stress in the home environment.

We also investigated people's sleep quality in the face of this social isolation, and 44% of respondents stated that they were sleeping the same number of hours they did before isolation. However, 56% reported some change in sleep hours, breaking down into those who are sleeping more hours than usual (26%) and people sleeping less hours than usual (31%). Regarding physical activity, 40% of people are doing some exercise, and 60% are not.

Regarding housing conditions, we asked the individual who completed the questionnaire during this period about the number of people sharing the same household. We observed that the mean number of people per household during social isolation in the interviewed group is 3.2. We found that the highest percentage of respondents is experiencing isolation in homes with 2-4 people, which largely represents the characteristics of the typical profile of the people who responded to the survey.

When asked about people's perception of living conditions, the responses showed that 82% consider their household good or excellent in terms of the factors: size, water supply, and ventilation, while only 18% consider the residence to be fair, poor, or bad. On another note, 63% answered that the household had an open area (terrace, yard, green area), against 37% who did not have one. Of those who answered that they have an open area, 68% think that it helps a lot to live in a period of isolation.

Regarding the expected time that people believe they can stay in social isolation, data showed that 16% of people said that they cannot stay a whole month in this condition, 20% answered that they could stay between one and two months in isolation, 3% believed they can stay more than two months, if necessary. However, most (61%) were willing to stay as long as necessary in this condition to face the pandemic.

The results allowed observing the factors that most influence the perception of the importance of self-isolation as the main strategy to face the pandemic. Just over 10% of respondents were not in isolation, but even among these, the percentage of those who believe in the social isolation strategy is a majority (75.79%).

Among the groups of people who are in total and partial isolation, the vast majority, 88.28%, and 93.32%, respectively, believe that social isolation contributes to the reduced number of COVID-19 victims. However, 7.88% still doubt the strategy's effectiveness. Of those who pointed out that the main impact of isolation is interrupting their income, 79% believe that social isolation reduces the number of COVID-19 victims.

We observed that the lower-income brackets include a higher percentage of people who claim to have stopped making money in the pandemic, 35% among those who declared having no income, 34.8% among those earning up to one minimum wage, and 24.76% among those receiving between 1 and 2 minimum wages, in contrast to the percentages obtained in the highest income brackets, which ranged from 12.7% to 17.5% (Table 1).

Still in the financial aspect, social isolation showed a significant correlation between the perceived impact on income and perceived family stress. This is more evident when stratified by income brackets, where the perceived financial aspect is greater for 33% of those without income; 42% for those with an income of up to one minimum wage, and 31.7% for people with an income between 1 and 2 minimum wages. Among those with higher income brackets, the main impact perceived was social interaction, 39.7% among those with income between 2 and 5 minimum wages, 45.5% in the group between 5 and 8 minimum wages, and 52% for those earning more than eight minimum wages (Table 2).

Regarding the perception of the main impact as a result of isolation, males elected proportionally more the impact on social interaction (41.2%) and the financial aspect (27.2%), while females elected proportionally less social interaction (38.6%) and the financial aspect (23%). The results were similar for the perceived impact on income. Females perceived proportionally more that they are saving or spending more, while males perceived loss of income more.

When the main impact observed by isolation is related to the perceived occurrence of some type of family stress, we observed that on average 80%, reported some type of family stress for everyone answering that they perceived some impact.

The group that responded that health is mostly affected is also the group reporting greater stress. They say that family stress was negligible (52.3%) or very high (34.6%). Among those who pointed out the financial issue as the main aspect affected during isolation, 55.1% said that family stress was low, and 23.6% affirmed that it was high. Percentages very close to those who cited social interaction as the most affected, 61.7% reported that family stress was low, and 16.2%

that it was high. This percentage is very close to the data on the relationship between perceived family stress and perception of how isolation affects income.

Other elements have a significant correlation with the perceived family stress in social isolation. Noteworthy is the number of people who are in the same household, the quality of the household, and the expected length of stay in isolation. Among these, we can highlight that those who claimed to be experiencing situations of family stress are the majority among those who are living with a larger number of people in the

household, although the percentage differences are negligible when more than four people are living in the household (Table 3).

The same situation was observed in the relationship between the quality of housing and the level of perceived stress. For those whose housing quality was perceived as excellent, 13.3% reported a lot of stress, 52.9% little stress, and 34% no stress. For those who classified the housing as bad, 52.4% reported a lot of stress, 36.2% little stress, and 11.4% no stress.

Strata differences were observed when the perceived quality of housing was related to the

Table 1. Respondents aged 18 and over, by income group, by impact on income or expenditure.

		Income brack				et		
Impact on income		No income	Up to 1 MW	Between 1 and 2 MW	Between 2 and 5 MW	Between 5 and 8 MW	Above 8 MW	Total
No	N	375	321	686	1,708	979	1,231	5,300
	%	(7.1%)	(6.1%)	(12.9%)	(32.2%)	(18.5%)	(23.2%)	(100%)
Saving	N	425	413	823	1,711	1,002	1,232	5,606
	%	(7.6%)	(7.4%)	(14.7%)	(30.5%)	(17.9%)	(22%)	(100%)
Spending more	N	128	207	421	766	374	323	2,219
	%	(5.8%)	(9.3%)	(19%)	(34.5%)	(16.9%)	(14.6%)	(100%)
No more	N	500	504	635	887	381	408	3,315
income	%	(15.1%)	(15.2%)	(19.2%)	(26.8%)	(11.5%)	(12.3%)	(100%)
Total	N	1,428	1,445	2,565	5,072	2,736	3,194	16,440
		(8.7%)	(8.8%)	(15.6%)	(30.9%)	(16.6%)	(19.4%)	(100%)

Chi-square test: $X^2 = 756.997$; p < 0.001.

Source: Own elaboration.

Table 2. Respondents aged 18 and over, by income bracket, by perception of the impact of isolation.

Impact of Isolation		No income	Up to 1 MW	Between 1 and 2 MW	Between 2 and 5 MW	Between 5 and 8 MW	Above 8 MW	Total
No	n	375	321	686	1,708	979	1,231	5,300
	%	(7.1%)	(6.1%)	(12.9%)	(32.2%)	(18.5%)	(23.2%)	(100%)
Saving	n	425	413	823	1,711	1,002	1,232	5,606
	%	(7.6%)	(7.4%)	(14.7%)	(30.5%)	(17.9%)	(22%)	(100%)
Spending more	n	128	207	421	766	374	323	2,219
	%	(5.8%)	(9.3%)	(19%)	(34.5%)	(16.9%)	(14.6%)	(100%)
No more	n	500	504	635	887	381	408	3,315
income	%	(15.1%)	(15.2%)	(19.2%)	(26.8%)	(11.5%)	(12.3%)	(100%)
Total	n	1,428	1,445	2,565	5,072	2,736	3,194	16,440
		(8.7%)	(8.8%)	(15.6%)	(30.9%)	(16.6%)	(19.4%)	(100%)
Total	n	1 428	1 445	2 565	5 072	2 736	3 194	16 440
	%	(8,7%)	(8,8%)	(15,6%)	(30,9%)	(16,6%)	(19,4%)	(100%)

Chi-square test: $X^2 = 756.997$; p < 0.001.

Source: Own elaboration.

time that people are willing to stay in isolation. For those whose residence was considered bad, 41.9% would stay less than one month and 38% as long as necessary, while 11.53% would stay less than one month and 68.8% would stay as long as necessary (Table 4) among those who consider their housing good or excellent.

Family stress also appears to influence the ability to remain in social isolation longer. Those who answered that they could stay as long as necessary in isolation have lower percentages of a lot of family stress, only 12.25%.

Another factor worth mentioning is the relationship between the perceived sleep quality and family stress, as both can be indicators of impact on health during isolation. At this point, we observed that 54.6% of those who are sleeping less perceive a lot of family stress, while of those who are sleeping the same amount of hours, 19.1% perceive a lot of stress, and of those who are sleeping more hours a day, 26.2% perceive a lot of family stress.

Among the people who declared that the housing quality was excellent, 47% are engaged in physical activities, and 53% are not, while among those who declared housing conditions to be poor or bad, 73% are not engaged in physical activities, and 23% are. The situation is similar when looking at different income brackets. Among those who claim to be without income, only 32% are engaged in physical activities, while 50% of people who are in the income bracket with more than eight minimum wages are engaged in physical activities.

Discussion

The overall results reveal issues that confirm what has been discussed in the media and the first studies and research published in Brazil regarding social isolation in the context of the COVID-199,16 pandemic. A survey conducted in the April 3-4 period shows similar results, in which 94% of the respondents were in some type of isolation. However, people who were leaving home to visit friends and relatives19 were also considered isolated, which is a variable not considered in this research.

What has been observed is that the effect the coronavirus pandemic on the world economy is significant, and especially in Brazil. Recent data show that there is already a significant increase in unemployment, and 19% of the people interviewed stated that they were already unemployed before the pandemic. At first, with the pandemic in the country, 22% declared they were out of work and, more recently, the number grew to 26%, that is, a quarter of the respondents¹⁹, a percentage close to that found by the respondents of this study who reported having lost their income.

Another field affected by social isolation is health. Stress is identified as one of the main consequences of social isolation^{20,21}. From the data presented, we observed that 73% of the people who participated in the research reported some level of stress due to social isolation, which suggests the need for specific communication actions to mitigate this problem.

Table 3. Respondents aged 18 and over, by the number of people in the household, according to the perception of the level of family stress.

		Number of people in the household								
Family stress		1	2	3	4	5	6	7	8 and over	Total
None	n	647	1,375	1,124	772	303	117	53	30	4,421
	%	(14.6%)	(31.1%)	(25.4%)	(17.5%)	(6.9%)	(2.6%)	(1.2%)	(0.7%)	(100%)
Some	n	649	2,241	2,574	2,258	898	339	134	87	9,180
	%	(7.1%)	(24.4%)	(28%)	(24.6%)	(9.8%)	(3.7%)	(1.5%)	(0.9%)	(100%)
High	n	204	548	788	698	390	118	52	41	2,839
	%	(7.2%)	(19.3%)	(27.8%)	(24.6%)	(13.7%)	(4.2%)	(1.8%)	(1.4%)	(100%)
Total	n	1,500	4,164	4,486	3,728	1,591	574	239	158	16,440
	%	(9.1%)	(25.3%)	(27.3%)	(22.7%)	(9.7%)	(3.5%)	(1.5%)	(1%)	(100%)

Chi-square test: $X^2 = 497.409$; p < 0.001.

Source: Own elaboration.

Table 4. Respondents aged 18 years and over, per additional time willing to practice self-isolation, by quality of household.

Quality of household		Additional time willing to practice self-isolation						
		Less than 1 month	1 to 2 months	Above 2 months	Time necessary	Total		
Bad	n	44	16	5	40	105		
	%	(41.9%)	(15.2%)	(4.8%)	(38.1%)	(100%)		
Poor	n	110	63	15	156	344		
	%	(32%)	(18.3%)	(4.4%)	(45.3%)	(100%)		
Fair	n	588	559	67	1,251	2,465		
	%	(23.9%)	(22.7%)	(2.7%)	(50.8%)	(100%)		
Good	n	1,158	1,515	236	4,232	7,142		
	%	(16.2%)	(21.2%)	(3.3%)	(59.3%)	(100%)		
Excellent	n	736	1,066	191	4,389	6,382		
	%	(11.5%)	(16.7%)	(3%)	(68.8%)	(100%)		
Total	n	2,636	3,219	514	10,068	16,438		
	%	(16%)	(19.6%)	(3.1%)	(61.2%)	(100%)		

Chi-square test: $X^2 = 459.444$; p < 0.001.

Source: Own elaboration.

One of the influencers of stress in people's lives refers to sleep pattern changes²². Moreover, the results showed that 67% of people felt a change in their sleep routine, and some individuals were sleeping more hours a day, and others less.

Another important variable related to people's health and well-being is physical activity. Physical exercise has become a challenge in social isolation. The survey data showed that the percentage of people who engage in some physical activity is 40%, a number compatible with the national mean of 38% of people who, in a context of normality, engage in some physical activity²³.

The mean of 3.2 people per household during isolation was close to the national mean of 3.3 inhabitants per household²⁴. Associated with the number of people per household, another significant variable in times of social isolation is housing quality, as Brazil is very diverse with very uneven living conditions, so the comfort and structure of this space can make a big difference, whether or not in isolation, but also in the conditions of that isolation.

The survey results also revealed that most people are very willing to stay home as long as necessary to face the pandemic. Similar data was reported in Italy, where 67.5% stated that they would continue the necessary time in self-isolation, should the government extend the law that established isolation in the country¹⁴. Data such as this could be monitored regularly, as this re-

search was carried out during the first month of isolation, with a tendency to saturate this condition over time. In other words, data reflects only the current picture, with people who were in isolation for a maximum period of twenty days, the difference between the date of data collection (April 6-8, 2020) with the first social isolation decrees (March 16, 2020).

The high adherence of respondents to isolation may have something to do with the fear of infection, and suffering even greater health and financial losses. Participants in previous studies on epidemic outbreak situations that required quarantine reported fears about their health and infecting others, in particular, relatives. This fear was greater among those who adhered to quarantine than those who were not quarantined²¹.

Even with so much information about the importance of isolation in controlling the pandemic, 7.88% of the population still questions this strategy, and this highlights the importance of strengthening campaigns to promote self-isolation and combat false information that contradicts and questions the social isolation strategy.

The analysis of different studies related to outbreaks and epidemics show that respondents cited the low level of information from public health authorities as stressors, which bring insecurity about the actions to be taken and generate confusion about the purpose of quarantine. This confusion stems from differences in style, approach, and content of various messages from

public authorities and poor coordination between the various jurisdictions and levels of government involved, a situation similar to that experienced in Brazil during the pandemic. These studies highlighted some lack of transparency by health and government officials about the serious nature of the pandemic²¹.

The apparent contradiction of those who are not isolated believing that the isolation measure will reduce the number of victims can be explained by the fact that social isolation is affecting the income of these people, which prevents them from adhering to isolation. This fact corroborates the findings of the English low-income population, who would like to be in isolation during the pandemic, but this possibility has been reduced by up to three times compared to the higher income segments¹⁵, which highlights the importance of income-transfer policies for the segment of the population that cannot be isolated, as a way of expanding the strategy to combat the pandemic, while minimizing the impact on social well-being.

Financial loss during quarantine is a serious socioeconomic problem and another risk factor for symptoms of psychological disorders that can last for several months into the quarantine. Moreover, although government support measures are already underway, in some cases, the amount that is received becomes insufficient or arrives too late, leading people to become dependent on their families, which tends to generate conflicts between relatives^{25,26}. Previous studies have shown that having inadequate basic supplies (for example, food, water, clothing, or accommodation) during quarantine was a source of frustration and was continuously associated with anxiety and anger 4-6 months after the end of isolation^{27,28}.

Despite being an indication, the sample did not accurately capture the reality of about 13 million Brazilians living in precarious settlements⁶. These people believed that housing conditions impose clear limitations on social isolation and the adoption of hygiene measures that health organizations affirmed were essential to avoid infection by the virus. Thus, home confinement based on these conditions requires complementary measures by the governments to ensure minimum standards of hygiene, health, and well-being6.

Besides the impact on income, especially in the poorest segments, we found that the group with the highest income underscored the impact on social interaction, which is a situation observed in other similar cases where confinement led to the loss of the usual routine and reduced social and physical contact with other people, causing boredom, frustration, and a feeling of isolation from the rest of the world^{20,21}.

As a result of this process, stress tends to escalate in the population, because although a relatively short time can already affect mental health, evidence shows that the negative psychological impacts are higher if the authorities determine a shorter expected isolation period and then increase that period. Thus, it would be less stressful if the authorities establish a longer period of isolation, and later reduce it14 if any improvements are observed.

The adverse psychological effect is not surprising during quarantine. However, the evidence that such effect can still be detected months or years later is very much of concern, and suggests the need to ensure that efficient mitigation measures are implemented as part of the quarantine planning process²¹.

Another relevant data showed that people with lower income and in poorer housing conditions are performing less physical activities than the group of people with higher income and better housing conditions, which underscore that people with lower income are more exposed to the financial problems caused by the COVID-19 pandemic, and are also more vulnerable to being affected by physical and psychological health problems associated with the seclusion required during social isolation.

These elements are affecting the perception and intention to adopt self-isolation and raise the concern of how long people will continue in isolation, and what measures can be taken to contribute to reducing financial, physical and mental health effects.

While collected in all Brazilian states and diverse segments of the population, the main limitation of data revealed and discussed in this study is sample convenience, which was subject to selection bias, in which a discrepancy was observed between the representation of individuals with higher income and education (the majority) compared to individuals with lower income and education (the minority). Thus, this work is not representative of the behavior of the Brazilian population as a whole, but only of the sampled universe.

Final considerations

As of April 20, Brazil had registered more than 39,000 confirmed cases and 2,507 COVID-19 deaths. However, estimates show that the actual number of infected people may be nine to fifteen times higher than the reported cases^{29,30}. Moreover, recent projection data shows that recurrent COVID-19 outbreaks in colder seasons are likely to occur after the initial severe pandemic wave. The prolonged or intermittent social isolation strategy may be necessary until 2022³¹ to prevent this situation from developing to a hospital capacity saturation.

Given this situation, it is necessary to have the best possible understanding of how the social isolation strategy is perceived by society and what are its effects on people's lives, and investigate different action strategies to reduce the isolation's impact on people's social well-being and financial conditions, which is a challenge to be addressed moving forward. We must also identify how the impact of isolation is reflected in the various segments of society due to income, gender, education, housing conditions, among others. This study attempted to do this by establishing some correlations between variables that can guide different strategies for different audiences. It is notorious and also revealed by data that the poorest populations are already highly affected by isolation, especially regarding income.

Even in the face of the social vulnerability produced by the pandemic, a key point to be addressed is the lower level of people's mobility on the streets and collective public spaces. The survey data showed that most respondents are contributing to this purpose, as they believe that the isolation strategy will be effective in preventing the hospital care collapse and reducing the number of COVID-19 victims, which points to the urgency of social protection and financial support measures, primarily for social segments all the more vulnerable in this moment of crisis.

Collaborations

A Bezerra worked on research design, text design, data analysis, and final drafting. CEM Silva worked on research design, text design, data analysis, and final drafting. FRG Soares worked on data analysis. JAM Silva critically reviewed the work.

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