BULLETIN 15 July 10, 2020

Covid-19: Public Policies and Society's Responses

Quality information for refining public policies and saving lives

Policy Briefing Note 15

The federal emergency basic income program has positive effects on the income of the most vulnerable population, but fails to reduce mobility. The lack of an integrated strategy undermines the effectiveness of the measures against the pandemic.

A survey with 1,654 residents in the cities of São Paulo, Fortaleza, Goiânia, Manaus, Rio de Janeiro, Recife, Salvador, and Porto Alegre enabled us to compare social distancing practices between those who received and those who did not receive the Emergency Basic Income (EBI), despite being eligible.

Main Conclusions

- In the two weeks prior to the interviews, non-beneficiaries of the program left their homes 3.43 days while those who received the benefit left their homes 3.51 days[1].
- We found no evidence of lower mobility among beneficiaries of the federal government program.
- Despite design and operational problems, the emergency program reached vulnerable segments of the population, which confirms our prior analyses published in earlier Bulletins.
- Women and those who do not identify themselves as white are the most common beneficiaries of the government assistance program. Conversely, those over 55 years old were the less common beneficiaries.
- For the most part, those who received the benefit left their homes for shopping activities, while non-beneficiaries left their homes for other activities, especially sportive and, to a lesser extent, to work.
- The Covid-19 infection risk was higher among beneficiaries of the emergency basic income program.

1 Standard deviation of 2.78 and 2.77 respectively.

Recommendations

- Based on our data, the Solidarity Research Network suggests that the emergency benefit, in order to play its full role in reducing the risk of Covid-19 infection and spread, must be supplemented by information programs designed for reducing people's mobility.
- Without this supplementary measure, whose primary responsibility lies with the public sector, the program may ultimately contribute to the abandonment of social distancing guidelines and prove ineffective in curtailing the spread of the virus. As shown in our previous Bulletins, integrated actions are more likely to succeed in the fight against the pandemic

Context

Since March, the Federal Government has implemented the Emergency Basic Income program (EBI) with monthly installments of R$600.00[2]. This benefit is equivalent to almost 60% of the national minimum wage and reached 48,720,875 people in April and 5,198,765 in May 2020[3]. This means that almost one in four Brazilians received the emergency assistance. On June 30, the Brazilian government decreed an additional two monthly installments, in the same amount, for current beneficiaries[4].

This Bulletin presents an assessment of the still largely unknown dynamics regarding the Emergency Basic Income Program.

First, we analyzed the mobility of those who are eligible and applied for the program, which differ from those who are eligible, yet did not apply for the program.

Second, we evaluated whether the assistance encouraged beneficiaries to "stay at home" compared to individuals whose only difference was not having received the benefit. Finally, we analyzed the relationship between the benefit and the risk of Covid-19infection.

Data and Analysis

Our data is based on a survey conducted by researchers from the universities of Oxford, USP, and FGV-SP of a sample taken in eight Brazilian capitals[5]. The survey was conducted via telephone between May 6 and 27. The sample was random and stratified by age, gender, income, and education level. The researchers interviewed 200 residents in 7 state capitals: Fortaleza, Goiânia, Manaus, Rio de Janeiro, Recife, Salvador, and Porto Alegre, and another 250 in São Paulo.

The survey asked the respondents to report their potential eligibility for the emergency basic income program[6]. Figure 1 summarizes the proportion of respondents in each of the response categories, referring to application and eligibility for the program.

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2 Federal Decree enacted on April 2, 2020, Law 13.982/2020 and Decree 10.316/2020

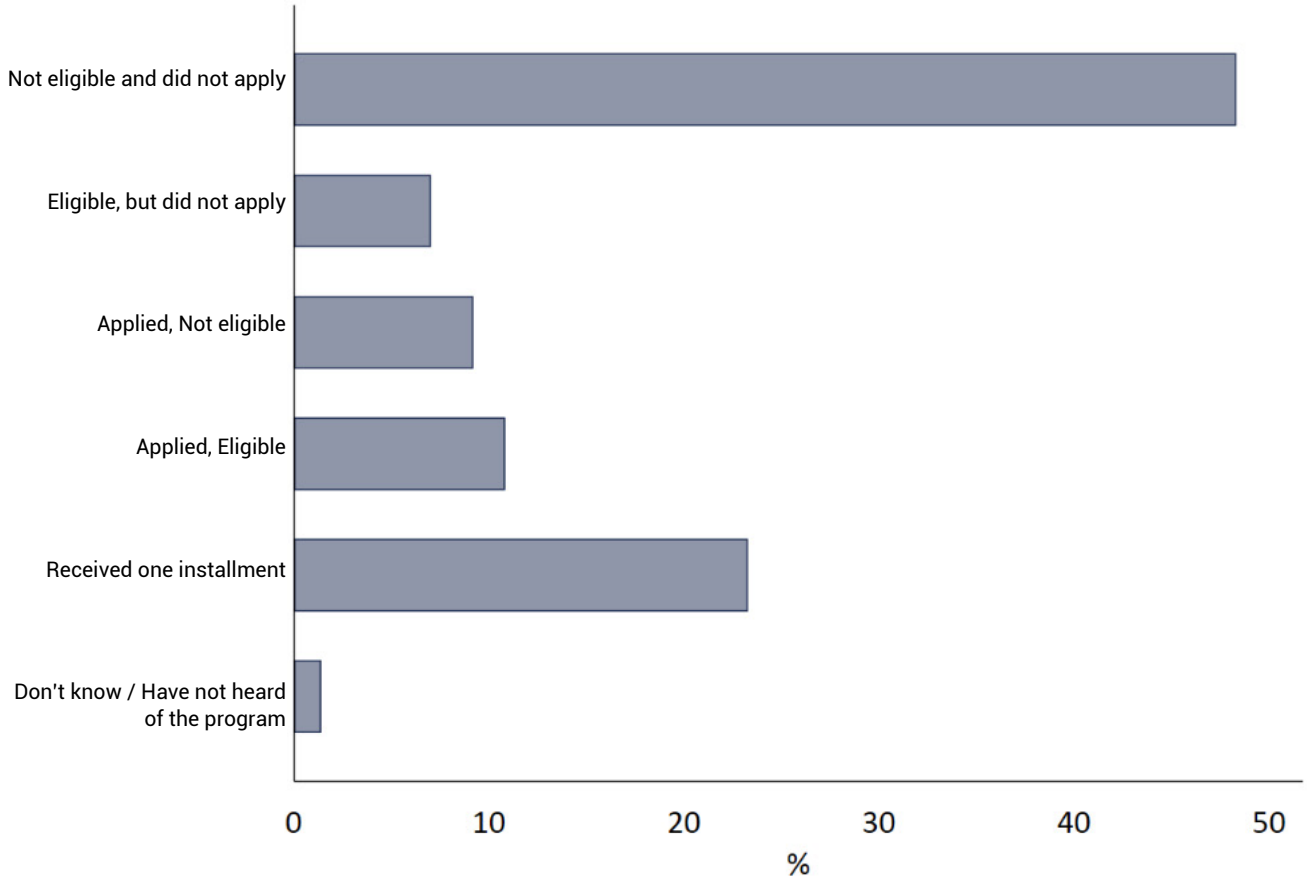
3 The amount of beneficiaries in April and May is listed at: www.portaldatransparencia.gov.br/pagina-interna/603519-download-de-dados-auxilio-emergencial. In those two months, the total number of beneficiaries was 53,919.640. According to the IBGE, the Brazilian population is 210,147,125 (2019).

4 Decree 10.412/2020.

5 Petherick, Kira, Goldszmidt, and Barberia, 2020

6 The survey had the following formulation: "We will now talk about the Emergency Assistance (in the amount of R$600). Over the past month, which of the following applies to you: a) *I am not eligible and have not applied to receive it;* b) *I am eligible, but I did not apply;* c) *I applied, but I was deemed ineligible;* d) *I applied and was deemed eligible, but I have not yet received the benefit;* e) *I received at least one installment of the R$600 Emergency Assistance*, and f) *I don't know what it is/I have not heard of the Emergency Assistance.*

Figure 1: Eligibility and Application for the Emergency Assistance Program



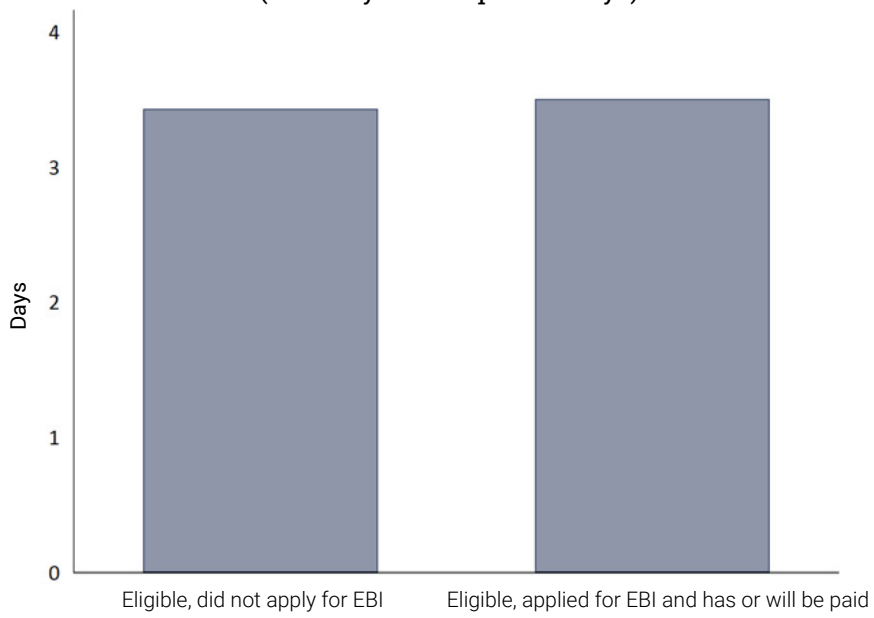
Source: Oxford-FGV-USP (2020)

In this Bulletin we focused our analysis on individuals who declared themselves eligible for the program. Of those interviewed, 41% declared themselves eligible to receive the benefit (680 out of 1654 people). However, only 564 individuals reported that they applied for the program (or were automatically qualified for the program, as is the case of beneficiaries of the Bolsa Família program). In other words, only 34% of respondents requested the assistance. From this group, 68% (or 385) received at least one installment and the remainder (179) were still waiting for the benefit to arrive. In total, 116 individuals who declared themselves eligible to receive the assistance did not apply for the program.

Does the benefit encourage beneficiaries to leave their homes less often for non-essential activities and thus reduce the risk of infection?

The Oxford-USP-FGV survey asked respondents their reasons for leaving the house. More specifically, they were asked whether they left the house to go to the bank, to buy essential products, to exercise, for professional events, for public events, to go to the supermarket, use public transportation, travel, visit friends and family, or other reasons. Figure 2 confirms that on average those who are eligible, but have not applied, left their homes for 3.43 days (with a standard deviation of 2.78). In turn, beneficiaries left their homes for 3.51 days (with a standard deviation of 2.77).

Figure 2: Average Number of Days That Eligible Individuals Left Home
(total days in the past 14 days)

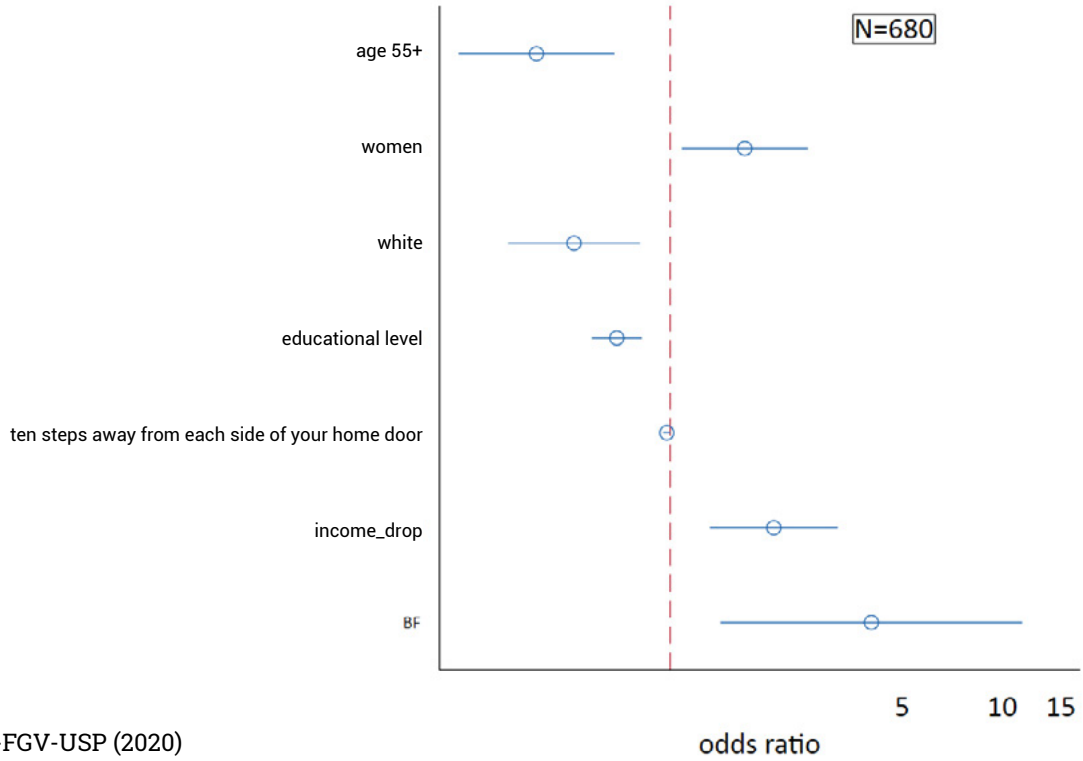


Source: Oxford-FGV-USP (2020)

Among those eligible, who applied for the benefit?

Our main interest in this Technical Note was the status of the emergency assistance: eligible individuals who declared themselves as applicants for the benefit received the value of 1 and individuals who self-declared as eligible, but chose not to apply, received the value of 0.[7] Our analytical sample was limited to survey respondents who belong to one of these two groups. Figure 3 shows how (and if) certain individual characteristics are associated with requesting the emergency basic income assistance[8].

Figura 3: Among those eligible, who applied for the Emergency Assistance Program?



Source: Oxford-FGV-USP (2020)

7 We estimated a logistic regression model to understand the differentiating characteristics between eligible persons who applied and those who did not apply for the emergency basic income program.
8 We considered the existing differences between the 8 capitals to construct the figure.

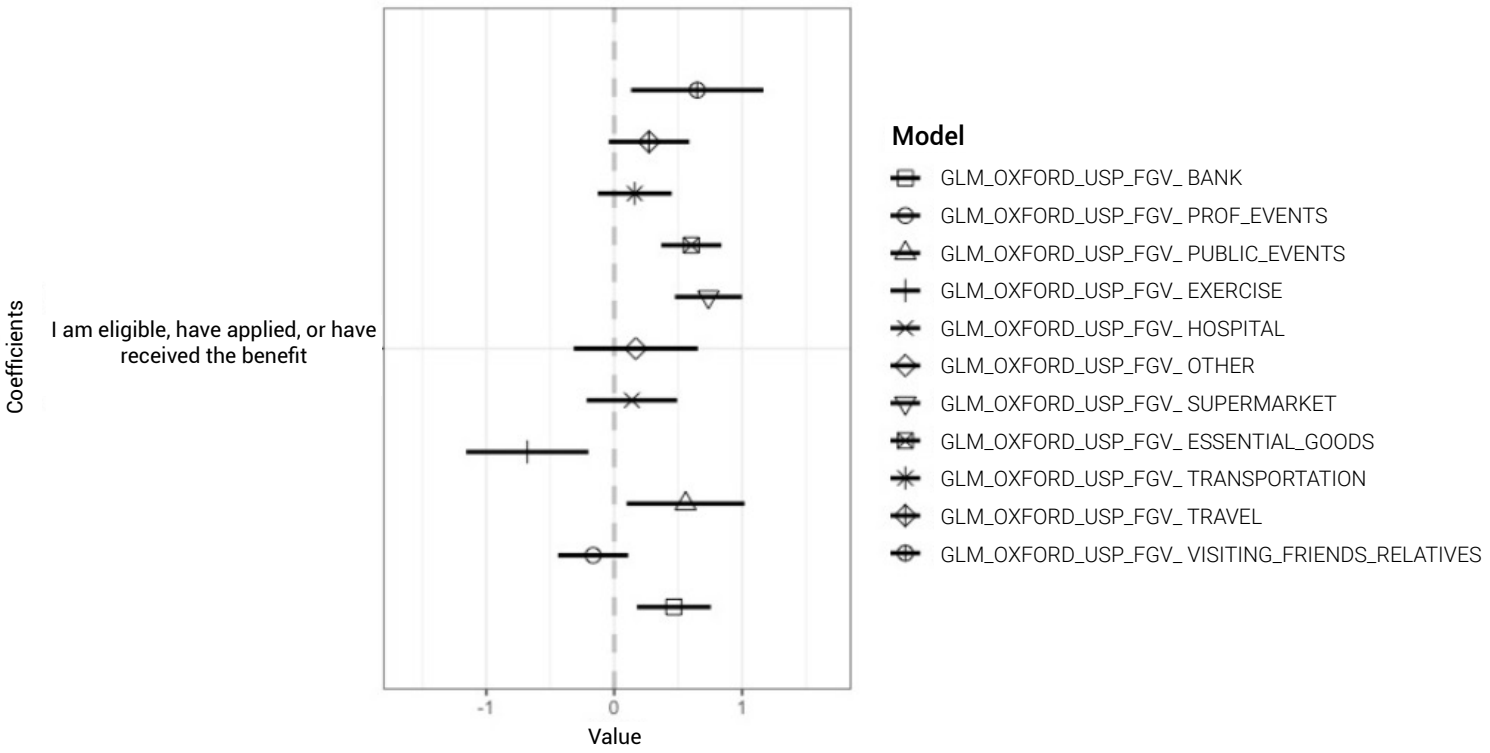
The results in Figure 3 suggest that women are more likely to apply for the benefit than men. People over 55 and people who declared themselves white are less likely to apply for the benefit. Figure 3 also indicates that the likelihood of applying for the emergency benefit decreases as the educational level increases.

As we know, the pandemic has been a significant source of economic instability for families, a predicament further confirmed by the survey, which revealed the following figures: only 18.7% of respondents stated that their income has remained unchanged since February. The hardest hit among the remaining 81.3% are, unmistakably, those within the lowest income brackets and those eligible for the emergency benefit. Among those who received the assistance, 50.85% stated that the benefit was below 50% of their family income. Circa 44.5% of the beneficiaries stated that they are no longer working and 18.8% stated that they have since worked less. 15.1% declared to work from home and 3.7% switched jobs. The results indicate that those who experienced a drop in family income (not including the benefit) were the most likely to apply for the emergency assistance.

Mobility patterns of beneficiaries compared to those who did not apply for the EBI

In this section, we analyzed the different types of trips performed between beneficiaries and non-beneficiaries of the emergency assistance. Figure 4 shows the influence of having received the assistance on mobility indicators.

Figure 4: Impact of the emergency assistance on mobility indicators



Source: Oxford-FGV-USP (2020)

EBI beneficiaries more often left the house to go to the bank, to shop, and visit relatives while non-beneficiaries mostly made trips to practice sports and, to a lesser extent, commute to work. This data suggests that the emergency benefit could have effectively contributed to social distancing had it been integrated with other measures, such as a more adequate cash transfer method to avoid trips to the bank, or measures to discourage trips for purchasing essential goods.

A significant finding was that individuals who received the assistance benefit often left home to visit friends and relatives, and with a large difference when compared against the group of non-beneficiaries. These outings for non-essential reasons become particularly problematic when associated with the finding that these same individuals tend not to wear masks when compared against those who did not apply for the EBI.

According to our data, those who have received or expect to receive the emergency basic income were more likely (1.5%) to have visited friends and relatives and more likely (4.1%) to participate in public events than individuals who did not receive the benefit.

Since the benefit was also designed to encourage social distancing among the most vulnerable population in an attempt to reduce the spread of the virus, the results of this survey suggest that the emergency basic income program, without supplementary measures, has proven to be very insufficient in reducing exposure to the virus.

Does the EBI policy affect the risk of Covid-19 infection?

Since Brazil has not conducted a satisfactory amount of covid-19 testing, a risk scoring system was developed based on the prevalence of Covid signs and symptoms in more than 50 thousand infected people (Zhao et al 2020). From this data, we created a machine learning algorithm to calculate the probability of Covid-19 infection for the sample in our study[9].

After crossing the symptoms[10] with the indicative data of beneficiaries and non-beneficiaries of the emergency assistance, we were able to conclude that the risk of Covid-19 infection varied between 0 and a maximum value of 5.09. Upon segmenting this data, we found that approximately 25% of respondents received scores greater than zero, but only 8.1% of the sample received scores in the range between 1 and 5.09. What matters here is that the average score was higher for individuals who received the emergency assistance (0.352) compared to those who did not (0.120). Within the sample of individuals with a Covid-19 risk score greater than 0, the average was also higher for individuals who received the assistance (1.714) compared to those who did not receive the assistance (0.497).

The results of this projection, based on artificial intelligence tools, indicate that individuals who received the emergency assistance became more likely to be infected by Covid-19.

9 The original reference (Zhao et al, 2020) included 10 additional symptoms for classifying risk of infection. In our research presented by the Network in this Bulletin, we used 5 of these symptoms (headache, body pain, sore throat, runny nose or diarrhea and nausea).

10 More specifically, respondents stated whether they had heart disease, chronic respiratory disease, diabetes, or cancer.

Conclusion

This Bulletin confirmed that the emergency basic income program reaches the most vulnerable segments of the population. Unfortunately, it also showed that the design and implementation of the program failed to decrease the mobility of beneficiaries compared to non-beneficiaries.

The data further suggests that beneficiaries of the federal program were at a higher risk of Covid-19 infection when compared to non-beneficiaries. As the program was also designed to protect the most vulnerable population from the virus and encourage social distancing measures, the results indicate that beneficiaries moved around more than non-beneficiaries.

These results underline how public policies to fight the pandemic must exist as an integrated set of measures – prevention, medical assistance as well as non-medical and economic assistance – to mitigate the hardships of the most vulnerable population and further alleviate the adverse effects of the pandemic.

This Bulletin, developed by researchers from North American and Brazilian universities, based on data collected through a cooperative research between the University of Oxford, USP, and FGV-SP hopes to contribute to the necessary articulation of public policies to fight the pandemic in Brazil, which has already taken the lives of over 70 thousand people as we enter the month of July.

References

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ABOUT

We are over 70 researchers, actively engaged in the task of improving the quality of public policies within federal, state, and municipal governments as they seek to act amidst the Covid-19 crisis to save lives. We dedicate our energies towards rigorous data collection, devising substantial information, formulating indicators, and elaborating models and analyses to monitor and identify pathways for public policies and review the responses presented by the population.

The Solidary Research Network has researchers from all scientific fields (Humanities as well as Exact and Biological Sciences) in Brazil and overseas. For us, the combination of skills and techniques is vital as we face the current pandemic. The challenge ahead is enormous, but it is particularly invigorating. And it would never have come to fruition if it weren't for the generous contribution of private institutions and donors who swiftly answered our calls. We are profoundly grateful to all those who support us.

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