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Vulnerability factors for psychological suffering during social distancing

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Abstract

Social distancing during the coronavirus disease 2019 (Covid-19) pandemic has had several effects on the mental health of Brazilians. With this in mind, we sought to identify determinants of greater vulnerability to psychological suffering during social distancing. We evaluated the responses of 566 Brazilians to an electronic questionnaire developed on Google Forms, finding Spearman correlations, an adequate non-parametric test, among the variables of interest. The most relevant factors were reduced income and age, financial losses during the pandemic, increased use of social media, a more frequent Covid-19 news consumption, and excessive workload at home. All of these aspects are related to an increase in stress, anxiety, and depressed mood. These results can support mental health care strategies during situations like the pandemic.

Keywords: Covid-19, social isolation, mental health, social media, socioeconomic factors

FATORES DE VULNERABILIDADE PARA O SOFRIMENTO PSICOLÓGICO DURANTE O DISTANCIAMENTO SOCIAL

Resumo

O distanciamento social durante a pandemia de *coronavirus disease 2019* (Covid-19) tem acarretado uma série de efeitos na saúde mental dos brasileiros. Pensando nisso, buscou-se identificar os fatores que ocasionaram maior vulnerabilidade para o sofrimento psicológico durante o distanciamento social. Na coleta de dados, foi aplicado um questionário eletrônico no Google Forms, respondido por 566 brasileiros. Posteriormente, realizaram-se testes não paramétricos de correlações de Spearman. Os fatores que causaram maior vulnerabilidade foram renda e idade reduzidas, perdas financeiras durante a pandemia, uso aumentado de redes sociais, maior contato com informações relacionadas à pandemia e o acúmulo de trabalho no *home office*. Todos esses aspectos estão relacionados ao aumento de estresse, ansiedade e humor deprimido. Pretende-se que esses resultados possam subsidiar estratégias de cuidado em saúde mental destinadas à população durante situações como a pandemia.

Palavras-chave: Covid-19, isolamento social, saúde mental, mídias sociais, fatores socioeconômicos

FACTORES DE VULNERABILIDAD AL SUFRIMIENTO PSICOLÓGICO DURANTE EL DISTANCIAMIENTO

Resumen

El distanciamiento social durante la pandemia de *coronavirus disease 2019* (Covid-19) tuvo varios efectos en la salud mental de los brasileños. Por lo tanto, buscamos identificar los factores que han causado mayor vulnerabilidad a la angustia psicológica durante el distanciamiento social. Para la recolección de datos, se aplicó un cuestionario electrónico en Google Forms, respondido por 566 brasileños. Posteriormente se realizaron pruebas de correlación de Spearman no paramétricas. Los factores identificados fueron menores ingresos y edad, pérdidas económicas durante la pandemia, mayor uso de las redes sociales, mayor contacto con información relacionada con la pandemia y retrasos en el teletrabajo. Todo esto está relacionado con un aumento del estrés, la ansiedad y el estado de ánimo deprimido. Estos resultados tienen como objetivo apoyar las estrategias de atención de salud mental para la población durante situaciones como la pandemia.

Palabras clave: Covid-19, aislamiento social, salud mental, redes sociales, factores socio-económicos

Coronavirus disease 2019 (Covid-19) is an infectious disease discovered in December 2019 in Wuhan, China. Caused by a new type of coronavirus, it soon spread across the globe, causing a serious pandemic with thousands of deaths, which required a series of lifestyle changes from the population in order to mitigate the contagion curve (Organização Pan-Americana da Saúde [Opas], 2020). At the time, this informative report by Opas was written, on November 19, 2020, there were a total of 55,326,907 confirmed cases and 1,333,742 deaths globally, with the region of the Americas being the most affected (Opas, 2020).

Among the existing strategies to curb contagion in Brazil, there were the extended social distancing (ESD) and the selective social distancing (SSD). Both were used based on the local reality. When the number of infected people reached more than 50% of the capacity of the health system, ESD was the most recommended. This measure consists of the closure of part of the commerce, with the exception of essential services, and the social isolation of the entire population. When this rate of contagion is below 50%, the option chosen by government managers was the application of SSD, which isolates only the population at risk for Covid-19. The two alternatives aim to reduce the speed of transmission of the virus in order to preserve the care capacity of hospitals (Aquino, 2020).

Although necessary, social distancing (SD) strategies have harmful effects on the mental health of the population due to psychosocial changes caused in lifestyles (Cellini et al., 2020; Brooks et al., 2020; Bezerra et al., 2020; Duarte et al., 2020). Among these changes, there are a number of factors that can provide greater vulnerability to psychological suffering for some individuals. The concept of vulnerability in mental health means the existence of an increased risk of developing some imbalance or problem that causes psychological distress (Chesnay, 2005). Psychological distress, in turn, is defined by the *Statistical diagnostic manual for mental disorders V*, as a range of symptoms and experiences of a person's internal life that are commonly held to be troubling, confusing, or out of the ordinary (American Psychiatric Association [APA], 2014, p. 830).

Through a broader perspective and a view of the totality of life, it is possible to identify factors associated with these vulnerabilities, such as the sociocultural condition, economic situation, exclusion, and social isolation, as well as personal characteristics such as age, gender, and history of illness in the family (Chesnay, 2005).

Within this context of psychosocial changes brought about by SD, the interruption of work activities has caused great damage to the population, resulting in financial losses for thousands of Brazilians who were unable to continue their work remotely. The reflection of this is the intensification of an economic crisis that affects mainly the poorer population. Data from the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística [IBGE], 2019) reveal a sad reality regarding the population's income distribution scenario. In 2018, about 25.3% of Brazilians received about BRL 420 monthly, which was equivalent to 44% of the minimum wage in force at the time. These data are mainly due to the historical informality that permeates the Brazilian labor market. Therefore, the precariousness of employment relationships in the midst of a pandemic can be a source of increased insecurity and fear.

Uncertainties regarding work aspects are not the only sources of anguish when faced with a pandemic. Extending SD deadlines, fear of being infected by the virus, frustration, boredom, lack of supplies at home, and stigma are some factors associated with a series of negative emotional and behavioral reactions, which can have lasting effects on the individual's mental health (Brooks et al., 2020).

Another aspect that should be highlighted in this scenario was identified in a study carried out in China, which points out that the spread of fear and anxiety through information on social media contributes to the increase in psychological suffering (Gao et al., 2020). An increase in depressive and anxiety symptoms associated with increased use of these sites during confinement was identified. Some specificities, such as the sharing of fake news, the excess of information that is disseminated in real time, and the sharing of negative feelings, such as fear, worry, nervousness, and anxiety on the part of internet users, make this cybernetic channel a potential risk factor for mental health (Gao et al., 2020; Duarte et al., 2020).

Considering this, health care and research during the pandemic cannot be focused only on the physical aspects of the illness. The understanding of health as a state of complete physical, mental, and social well-being reinforces the need for concerns about preserving mental health and well-being during the period of SD, since preventing the population from becoming ill is a *sine qua non* for the better return to social life. In addition, preserving mental health at this time is necessary not only to avoid suffering and prevent psychopathologies but also to ensure better adherence to these strategies to combat Covid-19 (Bezerra et al., 2020).

The emergency nature of the pandemic required efforts to produce knowledge from the scientific community, both in the biomedical areas and in the human and social sciences. Therefore, the aim of this study was to identify factors that cause greater vulnerability to psychological distress during SD.

Method

Design and participants

A quantitative, descriptive, and exploratory methodology was used in this study. The study sample was composed in a non-probabilistic way, by convenience, with voluntary participation of 566 Brazilians. This number is above the minimum of 385 observations estimated by the formula for calculating the minimum sample size for large populations. To participate in the study, the following inclusion criteria were considered: 1. being over 18 years old; 2. living in Brazil; and 3. practicing some type of SD (total or partial).

Instruments

As a tool to collect the data, an electronic questionnaire was applied, based on a review of the relevant literature and empirical research (Altena et al., 2020; Bezerra et al., 2020; Cellini et al., 2020; Brooks et al., 2020; Gao et al., 2020). The instrument applied was elaborated on the questionnaires and surveys application Google Forms and consisted of 38 multiple-choice

questions. Regarding financial aspects, a scale of loss levels was made available with the options: "none", "low", "medium", and "high", in which it was possible to mark only one option according to the respondent's personal evaluation. To assess whether there were people from a risk group in the house, the following question was asked: "Is there anyone in your house who belongs to one of the risk groups for Covid-19 (cardiovascular diseases, diabetes, elderly people, healthcare provider working to combat Covid-19...)?", to answer this question, it was possible to mark "yes" or "no", again based on a personal understanding of what it means to be in a risk group and based on the examples suggested in parentheses. To assess the perception of the increase or not of behaviors, feelings, and concerns in relation to the period prior to the SD, the instrument contained statements such as: "In relation to before the SD, I'm currently thinking more that...". With the exception of the questions about sociodemographic data that needed more diversified answers, all the other questions in the instrument had answers organized on a Likert-type scale with the options: "not at all", "a little", "moderately", "a lot", and "extremely". Most of the questions were multiple-choice with a single answer, with the exception of one question that evaluated the level of SD practiced, in which more than one option could be checked.

Procedures

Before the instrument was applied, this research project was submitted to and approved by the Research Ethics Committee of the Pontifical Catholic University of Minas Gerais (Pontifícia Universidade Católica de Minas Gerais [PUC Minas]) and properly approved in accordance with the Certificate of Presentation for Ethical Review (*Certificado de Apresentação para Apreciação Ética* [Caae]) No. 31747320.1.0000.5137.

To minimize possible self-selection biases, some strategies were adopted for the dissemination of these questionnaires. They were initially disseminated on WhatsApp groups composed of family members and groups of friends with heterogeneous characteristics in terms of purchasing power, level of education, professional choices, etc., and they were asked to spread it in groups with similar profiles. The section of comments in reaction to articles published by journalistic pages on Facebook with content related to the pandemic was also used as a field for dissemination. It is considered that, in these spaces, there is also great diversity in terms of respondents, particularly in terms of geographic region. The instrument was available between June 9th and 18th, 2020. Some ethical precautions were taken for the application of the instrument. Before participating in the study, the respondent was informed by means of a Free and Informed Consent Form, attached to the questionnaire itself, about the objectives and ethical precautions of the research, as well as the possible risks involved in participation.

Later, the data were extracted from Google Forms and initially treated in Microsoft Excel from the Office Professional Plus 2013 software package, in which the percentages describing the sample were also calculated. Then, the R version 4.0.2 statistical software was used to perform the more robust evaluation methods. The relationship between the categorical ordinal data of the sample was made by applying Spearman's correlations. This is a non-parametric test that

places observations in ordered series and, then, determines their relationship and the p-value of this estimate. For the analyses of this study, a significance level of 5% was considered.

Results

The sociodemographic analysis showed that the sample consisted of a majority of females (74.6%, n = 422). Regarding age, which ranged from 18 to over 60 years, there was a predominance of people aged between 25 and 39 years (38.3%, n = 217) and 40 and 59 (36.6%, n = 207). The majority had completed higher education or postgraduate education (74.9%, n = 424).

The respondents lived predominantly in the states of Rio Grande do Sul (62.9%, n = 356) and Minas Gerais (19.8%, n = 112), mainly because they are respectively the states where the first author of this study was born and lives. Regarding the level of SD practiced, from the multiple-choice question with the possibility of multiple answers, it was found that the majority of the respondents (75.6%, n = 428) reported being totally isolated or leaving only when extremely necessary.

A total of 76.0% (n = 430) of the individuals reported being in SD for more than three months, followed by 20.3% (n = 115) who had been for two months. The majority (71.4%, n = 404) reported living with up to three people, with a few living alone (10.6%, n = 60). Furthermore, 59.4% (n = 336) of the households had someone from a risk group. Regarding the financial situation, there was a predominance (38.1%, n = 215) of participants with a family income of more than six minimum wages (BRL 6,234), while a few (5.7%, n = 32) reported having a family income below one minimum wage. The financial impacts due to SD were felt by many of the respondents (72.1%, n = 408), who reported having had some type of loss, but only 9.0% (n = 51) considered that they had suffered a significant loss.

Analysis of correlations

Table 1 shows all the significant correlations at the 5% level found between the ordinal variables resulting from the application of the questionnaire. Disregarding self-correlations, 203 relevant associations were found. Next, those most closely related to the aims of this study will be described. To present the estimates in parentheses as the results are described, the letter c was adopted for the coefficient and the letter p, for the p-value.

Table 1

Matrix of the Spearman correlations that presented a significance level of 5%

Panel 1

	Age	Schooling	No. of people in the house	Income	Time in SD	Financial loss	Difficulties working	Accumulation of work	Exaggerated behaviors	Use of social media	Sleep changes	Calmness	Happiness
Age			-.13	.09			-.32	-.26	-.26	-.29	-.19		
Schooling			-.12	.41		-.10		.20		.10			
No. of people in the house	-.13	-.12				.11					.09		
Income	.09	.41				-.27		.10					
Time in SD									15%	10%			-12%
Financial loss		-.10	.11	-.27			.17	.13	.19	.11	.16		
Difficulties working	-.32					.17		.50	.43	.48	.53	-.11	
Accumulation of work	-.26	.20		.10		.13	.50		.35	.38	.36		
Exaggerated behaviors	-.26				.15	.19	.43	.35		.51	.45	-.09	
Use of social media	-.29	.10		.10		.11	.48	.38	.51		.41		
Sleep changes	-.19		.09			.16	.53	.36	.45	.41		-.13	
Calm							-.11		-.09		-.13		.59
Happy					-.12							.59	
Lonely	-.15		-.12			.09	.36	.22	.33	.25	.34	-.10	
Depressed	-.15			-.14		.18	.47	.28	.41	.28	.45	-.19	-.10
Stressed	-.23					.20	.50	.31	.47	.38	.46	-.18	
Anxious	-.25			-.11		.20	.53	.32	.48	.40	.50	-.17	
Worry about financial difficulties	-.22	.10		-.22		.45	.35	.22	.37	.35	.31		
Worry about productivity	-.16				.11	.13	.26	.25	.32	.32	.28		.12
Worry about risks of death				-.10		.11	.24	.19	.23	.23	.23		
Worry about becoming ill	-.13					.13	.30	.25	.31	.31	.30		
Worry about unemployment	-.21			-.20		.36	.30	.18	.31	.27	.27		
Trust in the information		.10	-.15				.11	.11		.16	.16	.09	.14
Avoiding information about Covid-19	-.11						.17	.11	.12	.16	.16		.12
Being well informed about Covid-19		.13		.13	.09		.10	.12	.17	.16	.18		
Trust in the impartiality of sources			-.09				.09	.11		.11	.15		

Table 1

Matrix of the Spearman correlations that presented a significance level of 5% (continuation)

Panel 2

	Lonely	Depressed	Stressed	Anxious	Worry about					Information about Covid-19			
					Financial loss	Productivity	Risks of death	Illness	Unemployment	Trust	Avoid	Seek information	Consider impartial
Age	−.15	−.15	−.23	−.25	−.22	−.16		−.13	−.21		−.11		
Schooling										.10		.13	
No. of people in the house	−.12				.10					−.15			−.09
Income		−.14		−.11	−.22		−.10		−.20			.13	
Time in SD						.11						.09	
Financial loss	.09	.18	.20	.20	.45	.13	.11	.13	.36				
Difficulties working	.36	.47	.50	.53	.35	.26	.24	.30	.30	.11	.17	.10	.09
Accumulation of work	.22	.28	.31	.32	.22	.25	.19	.25	.18	.11	.11	.12	.11
Exaggerated behaviors	.33	.41	.47	.48	.37	.32	.23	.31	.31		.12	.17	
Use of social media	.25	.28	.38	.40	.35	.32	.23	.31	.27	.16	.16	.16	.11
Sleep changes	.34	.45	.46	.50	.31	.28	.23	.30	.27	.16	.16	.18	.15
Calm	−.10	−.19	−.18	−.17						.09			
Happy		−.10				.12				.14	.12		
Lonely		.51	.44	.49	.25	.23	.18	.26	.21	.09	.11	.14	.14
Depressed	.51		.66	.66	.36	.25	.27	.34	.30		.13	.11	
Stressed	.44	.66		.71	.39	.30	.27	.35	.29		.20	.08	
Anxious	.49	.66	.71		.43	.37	.31	.46	.33		.19	.15	.11
Worry about financial difficulties	.25	.36	.39	.43		.37	.33	.40	.57		.16	.15	
Worry about productivity	.23	.25	.30	.37	.37		.25	.31	.27		.19	.24	
Worry about risks of death	.18	.27	.27	.31	.33	.25		.68	.28		.12	.22	
Worry about getting sick	.26	.34	.35	.46	.40	.31	.68		.29	.09	.14	.31	
Worry about unemployment	.21	.30	.29	.33	.57	.27	.28	.29			.16		
Trust in the information	.09							.09				.33	.46
Avoiding information about Covid-19	.11	.13	.20	.19	.16	.19	.12	.14	.16			−.15	
Being well informed about Covid-19	.14	.11	.08	.15	.15	.24	.22	.31		.33	−.15		.24
Trust in the impartiality of sources	.14			.11						.46		.24	

Note. Matrix of Spearman correlations between the ordinal variables resulting from the application of the questionnaire. Only statistically significant correlations at the 5% level are presented, with strong correlations being those above .70, moderate between .40 and .60, and weak below .40 (Dancey & Reidy, 2007, as cited in Akoglu, 2018).

The first category used to stratify the correlations was the age of the respondents. Older people, on average, lived with fewer people in the house ($c = -.13$; $p = .00$) and, as expected, had higher incomes ($c = .09$; $p = .04$). There was also a negative correlation between the number of people in the house and the feeling of loneliness ($c = -.12\%$; $p = .00$).

Regarding behaviors, the younger respondents had, on average, more difficulty working ($c = -.32$; $p = .00$), greater difficulty sleeping ($c = -.19$; $p = .00$), greater accumulation of work ($c = -.26$; $p = .00$), more exaggerated behaviors in relation to food and medication ($c = -.26$; $p = .00$), and greater use of social media ($c = -.29$; $p = .00$) in comparison with the period prior to the SD.

Negative feelings were also strongly associated with the respondent's age group. With SD, the younger people tended to feel more lonely ($c = -.15$; $p = .00$), depressed ($c = -.15$; $p = .00$), stressed ($c = -.23$; $p = .00$), and anxious ($c = -.25$; $p = .00$). In addition, they were more concerned with the need to be productive during the SD ($c = -.16$; $p = .00$), financial difficulties ($c = -.22$; $p = .00$), the risk of losing their job ($c = -0.21$; $p = .00$), and the possibility of getting sick ($c = -.13$; $p = .00$). They also presented more avoidance of information regarding the pandemic ($c = -.11$; $p = .01$).

A positive correlation was found between family income and education ($c = .41$; $p = .00$). Relevant results were found between levels of family income and negative feelings experienced in the SD. As expected, lower-income respondents reported feeling more depressed ($c = -.14$; $p = .00$), anxious ($c = -.11$; $p = .01$), afraid of losing their jobs ($c = -.20$; $p = .00$), thinking that they could have financial difficulties ($c = -.22$; $p = .00$), that their lives were at risk ($c = -.10$; $p = .01$), and considered themselves well informed ($c = .13$; $p = .00$). In addition, lower-income respondents reported a greater degree of financial loss ($c = -.27$; $p = .00$) during the SD, and those who suffered more financial loss felt more anxious ($c = .20$; $p = .00$), stressed ($c = .20$; $p = .00$), and depressed ($c = .18$; $p = .00$).

Correlation estimates indicated that the respondents with higher education, on average, used social media more ($c = .10$; $p = .01$). They also relied more on the information disclosed ($c = .10$; $p = .02$) and sought to be better informed about issues involving the pandemic ($c = .13$; $p = .00$). It is important to highlight that there was no significant correlation between education level and feelings.

The respondents that were in SD for longer reported having had more exaggerated behaviors ($c = .15$; $p = .00$) during this phase, eating, drinking, or taking medication excessively. In addition, they used social media more ($c = .10$; $p = .02$) and sought to be well informed about issues involving Covid-19 ($c = .09$; $p = .04$). People who used social media more often felt more depressed ($c = .28$; $p = .00$), stressed ($c = .38$; $p = .00$), and anxious ($c = .40$; $p = .00$). Calmness and happiness did not show significant correlations with the use of social media. Happiness levels were negatively correlated with time in SD ($c = -.12$; $p = .01$).

People who accumulated more work activities during SD had increased levels of stress ($c = .31$; $p = .00$), anxiety ($c = .32$; $p = .00$), and depressed mood ($c = .28$; $p = .00$), as well as a

decrease in states of happiness and calmness. It is important to highlight that there was no significant correlation between work overload and states of happiness and calmness. Individuals who thought more about productivity issues in SD had higher levels of stress (c = .30; p = .00), anxiety (c = .37; p = .00), and depressed mood (c = .25; p = .00). Likewise, those who had more difficulties working showed higher levels of stress (c = .50; p = .00), anxiety (c = .53; p = .00), and depressed mood (c = .47; p = .00). Finally, people who sought to be well informed about issues related to Covid-19 tended to be more stressed (c = .08; p = .05), anxious (c = .15; p = .00), and depressed (c = .11; p = .01), believed more that their lives were at risk (c = .22; p = .0) and had more difficulties sleeping (c = .18; p = .00) and working (c = .10 ; p = .02).

Discussion

Firstly, it is convenient to compare the descriptive statistics of the sample with that of the Brazilian population, as relevant divergences can limit the external validity of a study. The age group distribution was similar to the Brazilian age pyramid (except for considering only those over 18 years old), which has a widening in the age group from 25 to 59 years (IBGE, 2020). The largest groups of respondents were between 25 and 39 years old (38.3%, n = 217) and 40 and 59 (36.6%, n = 207). The mean *per capita* family income of the respondents, calculated at BRL 1,423.39, was also very close to that presented by the IBGE, of BRL 1,439.00 in 2019 (IBGE, 2019). Another aspect that deserves attention is the predominance (59.4%) of respondents who lived with people of a risk group. A similar pattern was identified in a study carried out by Duarte et al. (2020). An important sample bias was the level of education. As it was a survey carried out on the internet, the average level of education tended to be higher when compared to the entire Brazilian population. In addition, due to the social circle of one of the authors, there was a predominance of respondents from Rio Grande do Sul (62.9%, n = 356) and Minas Gerais (19.8%, n = 112) and that were female (74.6%, n = 422).

The age factor proved to be an aspect that provided greater vulnerability to psychological suffering during the period in SD, since the elevation of depressed mood, stress, and anxiety were more expressive among the younger people, data that were also confirmed in other studies (Duarte et al., 2020; Taylor et al., 2008, as cited in Brooks et al., 2020). One of the factors that could influence this correlation is the more intense use of digital media during this period. Younger age equated to higher use of social media, a behavior that was positively correlated with a self-perception of stress, anxiety, and depressed mood.

Despite these effects, it is important to highlight that there is no doubt about the importance of information and communication technologies during the pandemic, which allows social functioning even with SD, making remote work and distance learning possible, in addition to providing access to entertainment. Furthermore, they provide the population with technical and scientific information about the risks and the best way to protect themselves from the virus (Brooks et al., 2020). However, the negative correlation between the use of social networks and age may be one of the reasons why people of younger ages avoided information about Covid-19

since there is an excess of content on this topic that circulates on these digital platforms, without a great deal of concern regarding the veracity or value of the statements issued.

There is evidence that the increased use of these platforms and greater exposure to information about deaths and infections during the pandemic led to increased suffering and damage to mental health, with the emergence of symptoms of anxiety and depression (Gao et al., 2020; Duarte et al., 2020). Likewise, excessive exposure to information available on social media can lead to overload and increased risk perception (Choi et al., 2017). Regarding increased risk perception, this was an aspect identified in this study, being negatively correlated with the age factor. When evaluating only people who used social media to keep themselves informed, a positive correlation with risk perception was also evidenced.

However, in the sample studied, a positive correlation was identified between staying informed and depressed mood, stress, anxiety, risk perception, changes in sleep habits, and difficulties working. In turn, the income and education variables showed positive correlations with staying informed, while showing negative correlations with anxiety, stress, and depressed mood. In relation to these data, it is possible to identify that, in this sample, income and education were positively correlated, which leads to the inference that higher levels of education operate as a protective factor against the negative effect of information on Covid-19 since people with a higher level of education have a better ability to filter and interpret the content of the information (Gomes et al., 2020). The ability to critically read the available information also affects the perceived trust in relation to these contents, a conclusion possible due to the level of positive correlation between education and trust in the information, a result of this study.

An example that characterizes this effect of information on people with higher levels of education is the analysis of the fake news phenomenon, in which news with distorted information was disseminated massively during the pandemic. One study found that individuals with higher levels of education and family income are less susceptible to this type of content, as they use their own scientific-based knowledge as a filter to assess veracity (Gomes et al., 2020).

Another aspect that makes some groups more vulnerable to suffering is income. It is known that the Brazilian economic crisis in pandemic times exposes the greater vulnerability of people with low incomes. In this sample, factors such as income and financial loss presented negative correlations, data that show the greater vulnerability of people with lower incomes to the economic impacts during this period. It was also identified that income and age had a positive correlation and that negative correlations were found between age, financial concerns, and concerns about job stability. Therefore, it is evident that people with lower incomes, such as the younger people in this study, were more concerned about the financial effects of the confinement.

In relation to this result, a study carried out with 33,688 young people from each state of the country revealed that more than half of the sample registered to receive the emergency financial aid distributed by the government during the pandemic. For every ten young people, four had some financial loss, and many had to resort to alternatives to supplement their income (Conselho Nacional de Juventude, 2020).

Although the pandemic has accentuated financial difficulties among young people, the origin of this problem is old, as this age group has long suffered from the weaknesses that permeate their work context. According to the IBGE (2019), the greater vulnerability of young people in the labor market is already an issue discussed and documented in reports by the Organization for Economic Co-operation and Development. In Brazil, a survey carried out by the IBGE in 2018 showed that the highest rates of unemployment and underutilization of the workforce are among individuals between 14 and 29 years old.

Faced with a scenario of economic crisis, with increasing poverty and unemployment, the population is expected to fear and feel insecure in relation to keeping their jobs and their own lives, as identified in the sample studied. Some authors highlight positive correlations between the impact on income during the pandemic and the perception of psychological distress (Duarte et al., 2020; Jeong, 2016, as cited in Brooks et al. 2020). Bezerra et al. (2020) also explored an issue that was not evaluated in this study but that is directly related to the socioeconomic conditions of families, which is the comfort and quality of the housing. The data showed that, at houses with a better quality, the levels of stress perceived among the residents were lower. In addition, housing quality affects how much people are willing to remain in SD, with those who considered their houses good or excellent being more willing to remain in SD for as long as it was necessary. Therefore, it can be concluded that income is a determining element in complying with SD measures, with a strong influence on the way people perceive their emotional states during this period.

One way used to guarantee the income of the poorest households and prevent even greater chaos during the pandemic was the distribution of emergency financial aid during this period (Trovão, 2020). Although fundamental, the aid distributed in Brazil presented weaknesses. The low value distributed, the delay and bureaucracy for the effectiveness of access, and the inability to preserve jobs made it impossible to guarantee the livelihood of those who suffered most from the crisis (Trovão, 2020). In this scenario, the urgent need for State action to ensure the most vulnerable population has sufficient financial support to go through the restrictive measures is also a necessary condition for the maintenance of these people's mental health.

In relation to work issues, another point to be addressed here refers to the challenges experienced in working from home. Concerns about maintaining productivity through remote work, work overload, and difficulties in the performance of work activities were, on average, more pronounced among young people, and all these variables showed positive correlations with stress, anxiety, and depressed mood. These issues were not experienced only by the sample in this study. A study carried out with 32 students aged between 23 and 30 years showed that 50% of the participants experienced difficulties in the performance of work activities while working at home, 75% noticed an increase in the level of demand related to work in the previous months, 53% perceived their period of work during the home office as long and exhausting, and 50% faced health problems (Miranda, 2020).

In an interview with BBC World, the psychology professor and specialist in stress and trauma Elke Van Hoof, stated that the first psychological consequence of restrictive measures can be the feeling of overload and not being able to deal with obligations (Llorente, 2020). The author emphasized that the lack of attention to psychological care by the authorities will have consequences both in the health area and economic sector, after the end of the SD. The reason for this is that the suffering resulting from stress and exhaustion during this period will be responsible for illness in the population, affecting the availability of people to work and, consequently, the recovery of the economy after the pandemic (Llorente, 2020).

One aspect that can generate overload and make adaptation to working from home even more complex is the dependence on social media, as highlighted by the study by Beyens et al. (2016), in which the fear of missing out (FoMO) was found to cause psychological effects in individuals who access Facebook excessively. Other social media are also related to this phenomenon. The FoMO is an exacerbated feeling that arises when a person thinks that other more interesting events are happening elsewhere. The authors emphasized that the greater need for belonging and popularity in young people determines greater use of the social media and that this relationship is mediated by the FoMO, which, in turn, is associated with higher levels of stress.

A negative correlation between age and sleep disorders was also evaluated. In relation to this, a European study indicates that sleep habits undergo changes during SD due to factors such as reduced exposure to the sun, reduced physical activity, and psychological distress (Altena et al., 2020). In addition, the lack of social *Zeitgebers*, such as the hours that mark the work and/or study routine, and abrupt changes in living conditions significantly affect sleep habits (Cellini et al., 2020). Individuals with impaired sleep can become more stressed and develop compulsions, as a maladaptive way of coping with suffering, as verified in the study sample. Accordingly, the need to adapt and maintain time to sleep, eat, work, rest, exercise, and sunbathe are fundamental strategies for the preservation of circadian rhythms and the maintenance of mental health (Cellini et al., 2020).

Final considerations

The results presented respond to the initial aims of this study, which sought to identify factors that cause greater vulnerability to psychological suffering during SD.

Among the factors of greater vulnerability identified, younger age and reduced income, financial losses during this period, increased use of social media, greater contact with information related to the pandemic, and greater accumulation of work during remote activities stand out. All these aspects showed positive correlations with self-perceived stress, anxiety, and depressed mood.

The SD measures, although necessary, have led to several negative changes in lifestyles. In this context full of losses and suffering, inequalities were accentuated, putting some groups at a greater disadvantage in terms of psychosocial conditions to adhere to the recommended

strategies. Accordingly, considering the factors that make some people more vulnerable to psychological suffering during this period is a necessary strategy to contemplate more appropriate and efficient mental health care actions.

Finally, it should be emphasized that it is not possible to construct perfectly representative samples of the population only with data from surveys carried out on the internet since not all of the population has access to the it. Some predominant characteristics of this sample, such as the level of education, the female gender, as well as the geographic location of the respondents, could hinder the generalization of the findings for the entire Brazilian population. Furthermore, a restriction inherent to questionnaires is the fact that people can lie, cheat, or deceive themselves when responding.

As a way to complement this study, personal and detailed reports of the experience with SD would provide a greater comprehension of these findings. It is suggested that future studies consider conducting interviews with open questions with some of the individuals that were in this condition, in order to contribute to scientific knowledge in the area.

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