ORIGINAL ARTICLE

Distress Indicators among LGBT+ Youth during Social Isolation by COVID-19 in Brazil

Indicadores de distress entre jovens LGBT+ durante o isolamento social pela COVID-19 no Brasil

Indicadores de distress entre jóvenes LGBT+ durante el aislamiento social por COVID-19 en Brasil

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Abstract

The objective was to investigate distress indicators among LGBT+ youth during social isolation and its associated factors in Brazil. 816 young LGBT+ (lesbian, gay, bisexual, transgender people and those belonging to other sexual and gender minorities) Brazilians between the ages of 18 and 32 were accessed through an electronic form. Indicators of distress (depression, anxiety, stress) were measured, using scales such as the DASS21, LGBT Identity, Social Support, Family Dysfunctionality, Neuroticism, and Outness. Multiple linear regression presented a significant model in which negative LGBT identity, perceived social support, family dysfunctionality, neuroticism, perceived family acceptance, and gender played a role as predictors of distress.

Keywords: COVID-19; Distress; Sexual and gender minorities; Youth; Mental health

Resumo

O objetivo foi investigar indicadores de distress (sofrimento psicológico) entre jovens LGBT+ durante o isolamento social e seus fatores associados no Brasil. 816 jovens LGBT+ (lésbicas, gays, bissexuais, transgêneros e pertencentes a outras minorias sexuais e de gênero) brasileiros, entre 18 e 32 anos, foram acessados por meio de formulário eletrônico. Indicadores de distress (depressão, ansiedade, estresse) foram medidos por meio de escalas como DASS21, Identidade LGBT, Suporte Social, Disfuncionalidade Familiar, Neuroticismo e

Outness. A regressão linear múltipla apresentou um modelo significativo no qual identidade LGBT negativa, suporte social percebido, disfuncionalidade familiar, neuroticismo, aceitação familiar percebida e gênero desempenharam um papel como preditores do distress.

Palavras-chaves: COVID-19; Distress; Minorias sexuais e de gênero; Juventude; Saúde mental

Resumen

El objetivo era investigar los indicadores de distress (sufrimiento psicológico) entre los jóvenes LGBT + durante el aislamiento social y sus factores asociados en Brasil. Se accedió a 816 brasileños LGBT+ (lesbianas, gays, bisexuales, transgénero y pertenecientes a otras minorías sexuales y de género) brasileños, entre 18 y 32 años, a través de un formulario electrónico. Los indicadores de distress (depresión, ansiedad, estrés) se midieron mediante escalas como DASS21, Identidad LGBT, Apoyo Social, Disfuncionalidad Familiar, Neuroticismo y Outness. La regresión lineal múltiple presentó un modelo significativo en el que la identidad LGBT negativa, el apoyo social percibido, la disfunción familiar, el neuroticismo, la aceptación familiar percibida y el género jugaron un papel como predictores de distress.

Palabras clave: COVID-19; Distress; Minorías sexuales y de género; Juventud; Salud mental

Introduction

Since December 2019, the world is living with a novel coronavirus, responsible for the severe acute respiratory syndrome of coronavirus 2 (SARS-CoV-2)[1], identified as the agent that causes the coronavirus disease (COVID-19), the name officially adopted by the World Health Organization. The disease was characterized by its rapid spread, which one year after the detection of the first case had already reached over 96 million cases on all continents of the planet[2]. In Brazil, the first case was confirmed on February 26th and, on March 3rd, there were more than 500 suspected cases. By December 2020, Brazil had already counted more than 190,000 deaths and more than 7,500,000 cases. By June 2021, we're already approaching 17 million cases and 500,000 deaths[3].

In addition to the medical risks associated with COVID-19, with the high and rapid rates of mortality and contamination, the psychological aspects associated with the pandemic situation are highly relevant. Previous studies have already reported associations between psychological variables and epidemic situations[4-5]; with emphasis on high complaints of distress (anxiety, stress and depression)[6-7]. One of the first studies on psychological responses to the coronavirus was conducted in China, finding a strong association with increased fear and other negative emotions, as well as anxiety and stress[8]. Researchers also found increased use of alcohol and tobacco during the first months of the epidemic in China.

Distress is a construct that encompasses a plethora of symptoms and uncomfortable affective states, such as anxiety, anguish, affliction, sadness, depression, or stress. It can be taken as a broader negative mental health indicator or as a general psychological suffering measure in cases where there a specific diagnosis is not present.

Several countries adopted social isolation and lockdown measures in an attempt to control the virus transmission and reduce the search for the health system. The isolation measures, although effective in combating the pandemic, were also associated with an increase in complaints related to psychological disorders, constituting a set of symptoms called distress[9]. Also, effects such as confusion, anger, and post-traumatic stress were reported. Other important aspects related to epidemics are fears about the virus or infection, frustration, decreased income, inappropriate information, and stigma[10].

In a study conducted in Spain, higher levels of depression, anxiety, and stress were found among younger and chronically ill people who adhered to social isolation as a measure of protection against COVID-19[7]. In Portugal, a study with university students demonstrated a significant increase in depression, anxiety, and stress in the same sample before and after the declaration of the COVID-19 pandemic[10]. In China, Wang et al.[8], in a study involving college students, reported that little more than half of them declared feeling a very strong emotional impact as a result of the COVID-19 pandemic, and one-third of the sample presented severe anxiety symptoms during social isolation. In Italy, similar results were found in a sample of adolescents, with differences in subgroups by affected regions and group variables such as social class and race[11].

Similar to the medical effect of the disease, which strongly varies among different social groups (for example different mortality rates), the psychological effects present great variation depending on a series of individual and group variables[12]. Access to health services, conditions for appropriate social isolation, media, and entertainment, among other factors, can lead certain groups and individuals to more precarious situations to face the pandemic[13]. It is essential to think about notions of vulnerability in this situation. Thus, inequalities and denial of rights already existing in the pre-pandemic period can be maximized by the imposed situation of chaos in public health and precarious conditions of social isolation[14]. LGBT+ sexual minorities, as well as other groups living in a situation of vulnerability, are especially compromised in this context[15].

Salerno, Williams, and Gattamorta[16] reviewed the main arguments for thinking about the increase in vulnerability in the LGBT+ group during the pandemic and social isolation, including higher rates of tobacco use, immune suppression due to the lack of treatment for HIV in certain groups, prejudice in access to the health system, isolation from social and family support networks and higher prevalence of mental disorders. Besides, some social aspects related to prejudice and various forms of violence increase this group's distance from health and protection services[17]. Silva and Cerqueira-Santos[18] highlight that the LGBT+ population tends to experience low perceived family support, frequently reporting ruptures and stressful situations in domestic life caused by sexual orientation. And this, in addition to family confinement, may potentialize negative affections and undesirable outcomes in the mental health of these young people. These are general risk indicators that even individuals not directly exposed may experience the effects of related stigma.

Considering the above, there is a lot of evidence that alerts to the need to understand possible psychological repercussions of the COVID-19 pandemic for specific groups. Thus, strategies for prevention and psychological care of the population can be designed and executed more efficiently[9]. Also, social measures should be taken that respond to the needs of these groups, avoiding the increase of violence and exclusion

from the protection and health systems. The general objective of this study is to investigate distress indicators among LGBT+ youth during social isolation and its associated factors during the COVID-19 pandemic in Brazil, surveying distress indicators based on measures of depression, anxiety, and stress. An additional objective is to identify factors associated with the distress of these young people, especially social and family support. It is hypothesized that social isolation with the family is associated with variations in distress in the sample.

Method

Participants

The inclusion criterion for participation was to self-identify as LGBT+ youth and to be between 18 and 32 years old. The participants were treated as a single group in a study with a survey design. It was not possible to carry out a control group or other types of comparison due to the extraordinary situation of the pandemic, which exposed everyone to the same research situation.

Instruments

A set of scales and questionnaires arranged on an online platform were used. The instruments were carefully selected to enable the achievement of the objectives.

Distress: the Depression Anxiety Stress Scales – 21 (DASS[19]) was used, which contains 21 items and is answered on a 4-point Likert scale. Its items treat symptoms of depression, anxiety, and stress in the previous week. Cronbach's alpha in this sample was 0.948.

Neuroticism: the NEO-Five Factor Inventory (NEO-FFI[20]) was used. Based on the Big Five model, 12 items assessed on a 5-point Likert scale were used to evaluate personality traits of neuroticism. Cronbach's alpha in this sample was 0.834.

Family dysfunctionality: Systemic Clinical Outcome and Routine Evaluation (SCORE-15[21]) was used. Consisting of 15 items answered on a 5-point Likert scale, it evaluates in its three factors Family Resources, Communication in the Family, and Family Difficulties. Cronbach's alpha in this sample was 0.915.

Perception of Social Support: the Multidimensional Scale of Perceived Social Support (MSPSS[22]) was used. Containing 12 items distributed in three factors (family, friends, and other significant), this scale is answered on a seven-point Likert scale, assessing the subjective perception of social support. Cronbach's alpha in this sample was 0.895.

Negative LGBT Identity: two factors from the Lesbian, Gay, and Bisexual Identity Scale (LGBIS[23]), adapted to include trans people, dissatisfaction with identity (6 items; evaluates the degree of dissatisfaction with their LGBT+ identity) and sensitivity to stigma (3 items; evaluates the extent to which individuals experience anxious expectations of rejection based on their LGBT+ identity) were used. It is answered on a seven-point Likert scale. Cronbach's alpha in this sample was 0.844.

Outness: was assessed using an inventory adapted by the authors[24], which evaluates the degree of openness of sexual orientation in seven contexts (e.g. mother, siblings, teachers, etc.). It is answered on a seven-point Likert scale with the option "not applicable". The calculation of the final score disregards those contexts that do not apply to the respondent. Cronbach's alpha in this sample was 0.712.

Socio-identity questionnaire: questions developed by the authors to investigate social aspects and participants' identities. Questions related to age, housing, sexual orientation, gender identity, the experience of social isolation, perceived family acceptance of LGBT+ identity were used.

Procedures

This research is part of an international partnership with the University of Porto (Portugal), which included Brazil and five other countries in Europe and Latin America. The name of the project is "Social Support Networks and Psychological Health among LGBT+ Young People during the COVID-19 Pandemic". The seven participating universities applied a similar research protocol through an online platform during the period of social isolation caused by the COVID-19 pandemic. In Brazil, data collection took place between May 9 and 22, 2020, a period in which deaths by COVID-19 in Brazil increased from about 10,000 to more than 20,000 and cases increased from about 155,000 to more than 330,000[3].

The survey was disseminated through social networks (Facebook, Instagram, and Twitter) on a webpage of a University and among volunteers. This research was approved by CONEP and the ethical principles for research involving human beings were observed, as determined in resolutions CNS 466/12 and 512/16. The participants were informed of the procedures and objectives of the research through a Free and Informed Consent Term and only those who declared their agreement with the terms of the research completed the online questionnaire.

Data Analysis

The questionnaires answered were transferred to the software SPSS. Descriptive and inferential statistical analyses were performed: means, frequencies, t-tests, correlations, and linear regression. The t-tests carried out assessed whether there were differences in terms of gender (male and female), being in social isolation or not and being in isolation with family members or not, concerning the selected continuous variables: distress, perception of social support, family dysfunctionality, neuroticism, negative LGBT identity, outness, and perceived family acceptance. The correlations involved these same continuous variables. The linear regression performed was dependent on the distress and independent variables: perceived social support, family dysfunctionality, neuroticism, negative LGBT identity, outness, perception of family acceptance, gender (dummy, intersexuals were removed from this analysis), being in social isolation (dummy) and being in isolation with the family (dummy). The backward regression method was used. The impossibility to plan data collection as a result of the pandemic situation limits the possibilities of comparison and discussion based on data collected from previous studies.

Results

A total of 816 young LGBT+ Brazilians between 18 and 32 years old participated in this study, the average age was 23.02 years (SD = 3.98). Approximately a quarter of the participants (25.9%) were under 20 years old at the time of the survey. The majority were white (53.8%), followed by pardo (mixed-race, 27.9%), black (15.9%), and other ethnic-racial identifications (2.3%). As for schooling, 52.6% had already completed high school, while 45.0% had completed college education. In the sample, 95,5% of the young people lived in urban areas in 26 Brazilian states, plus the Federal District. São Paulo (24.0%) and Sergipe (12.5%) were the most represented states. The regions with more respondents were the Northeast (41.6%), Southeast (38.5%), and South (12.6%).

The participants identified themselves as male (46.7%), female (52.1%), or intersexual (1.2%). They were mostly cisgender (91.8%), with transgender (3.1%), non-binary (4.7%) and other identifications (0.5%). Regarding sexual orientation, they were distributed among homosexuals (59.3%), bisexuals (32.7%), pansexuals (5.6%), and others (2.3%). Those who declared being in social isolation were 79.5%. Of the participants, 70.3% lived with family, while 10.0% did not and returned home because of the pandemic, and 19.6% were not with their family during the social isolation period. The frequency distribution and mean scores calculated for the research variables are presented in Table 1.

Table 1. *Averages and frequencies of scores of the variables of interest.*

	Mean *(SD)*	Frequency distribution		
		Lower	Medium	Higher
Family dysfunctionality	43.23 (11.75)	25.1%	57.0%	17.9%
Neuroticism	32.18 (8.14)	4.0%	47.3%	52.7%
Outness	4.37 (1.44)	16.7%	62.7%	20.6%
Distress	29.25 (15.23)	34.4%	42.2%	23.4%
Perceived Social Support	61.33 (13.64)	7.5%	56.5%	36.0%
Perceived Family Acceptance	6.20 (3.47)	24.5%	28.9%	46.6%
Negative LGBT Identity	26.89 (10.82)	53.9%	39.2%	6.9%

Significant differences were found between male and female individuals in several of the measures used: Family dysfunctionality [M_{male} = 41.52 (SD = 10.83); M_{female} = 44.61 (SD = 12.34); t = 3.786; $p < 0.001$; Cohen's d = 0.26]; neuroticism [M_{male} = 30.46 (SD = 8.29)]; M_{female} = 33.71 (SD = 7.75); t = 5.751; $p < 0.001$; Cohen's d = 0.40); outness [M_{male} = 4.63 (SD = 1.35); M_{female} = 4.14 (SD = 1.49); t = -4.842; $p < 0.001$; Cohen's d = 0.34]; distress [M_{male} = 25.65 (SD = 14.54); M_{female} = 32.37 (SD = 15.15); t = 6.407; $p < 0.001$; Cohen's d = 0, 45]; perceived family acceptance [M_{male} = 6.67 (SD = 3.29); M_{female} = 5.82 (SD = 3.59); t = -3.503; $p < 0.001$; Cohen's d = 0.24]. No differences were found regarding perceived social support and negative LGBT identity only.

Evaluating all the respondents, regarding the groups that are and are not in social isolation, significant differences were only found regarding the perceived family acceptance [M_{yes} = 6.07 (SD = 3.52); M_{no} = 6.74 (SD = 3.24); t = -2.221; p = 0.027; Cohen's d = 0.19]. Regarding the groups that are and are not in isolation with

the family, no significant differences were found in terms of distress. The results were significant in: negative LGBT identity [M_{yes} = 27.28 (SD = 10.77); M_{no} = 25.28 (SD = 10.88); t = 2.108; p = 0.035; Cohen's d = 0.12]; family dysfunctionality [M_{yes} = 44.16 (SD = 11.46)]; M_{no} = 39.40 (SD = 12.16); t = 4.655; p < 0.001; Cohen's d = 0.40]; neuroticism [M_{yes} = 32.63 (SD = 8.01); M_{no} = 30.30 (SD = 8.41); t = 3.266; p = 0.001; Cohen's d = 0.28]; outness [M_{yes} = 4.28 (SD = 1.43); M_{no} = 4.76 (SD = 1.45); t = -3.778; p < 0.001; Cohen's d = 0.33]; perceived social support [M_{yes} = 60.39 (SD = 13.72); M_{no} = 65.20 (SD = 12.63); t = -4.034; p < 0.001; Cohen's d = 0.36]; perception of family acceptance [M_{yes} = 5.71 (SD = 3.48); M_{no} = 8.24 (SD = 2.61); t = -10.212; p < 0.001; Cohen's d = 0.71].

The correlations generated between the continuous variables were significant and varied between small and moderate. These data are available in Table 2. The greatest magnitudes found were between neuroticism/distress pairs and perceived social support/family dysfunctionality.

Table 2. *Pearson correlation matrix.*

	Correlation coefficients *r*					
	(1)	(2)	(3)	(4)	(5)	(6)
(1) Family dysfunctionality	–	–	–	–	–	–
(2) Negative LGBT identity	0.241[a]	–	–	–	–	–
(3) Distress	0.413[a]	0.281[a]	–	–	–	–
(4) Perceived social support	-0.508[a]	-0.270[a]	-0.352[a]	–	–	–
(5) Neuroticism	0.391[a]	0.310[a]	0.637[a]	-0.328[a]	–	–
(6) Outness	-0.254[a]	-0.300[a]	-0.159[a]	0.332[a]	-0.181[a]	–
(7) Perceived family acceptance	-0.437[a]	-0.278[a]	-0.182[a]	0.373[a]	-0.205[a]	-0.435[a]

[a] p < 0.001

Finally, the multiple linear regression performed presented a significant final model [$F_{(6,799)}$ = 114.14; p < 0.001; r^2 = 0.462]; with neuroticism (β = 0.514; t = 17.191; p < 0.001); perceived family acceptance (β = 0.068; t = 2.247; p = 0.025); family dysfunctionality (β = 0.147; t = 4.472; p < 0.001); perceived social support (β = -0.110; t = -3.507; p < 0.001); gender (β = 0.108; t = 4.004; p < 0.001) and negative LGBT identity (β = 0.078; t = 2.718; p = 0.007) as predictors of distress. Four steps were carried out by the software using the backward method. Thus, the variables that did not contribute were progressively excluded from the model: outness, the classification of being in social isolation or not and being in isolation with the family or not.

Discussion

The rate of social isolation reported in this survey (79.5%) was well above that practiced in Brazil during the COVID-19 pandemic, which peaked in April with just over 60%, remaining at 40% on average[25]. A high isolation rate was also found in other samples of non-heterosexual men in Brazil and Portugal though[26]. This may be related to the sample's high schooling, age range, and group specificities. Also, about 7 out of 10 young men in this sample lived with their families and about 1 out of 10 returned to their families during the period of social isolation. This imposes other dynamics on the behavior of this group.

Women were more indicative of family dysfunctionality, neuroticism, and distress, while men indicated higher outness and perceived social support. This may represent a risk for this group, as lesbians and (some) transsexual women, besides accumulating stigma related to gender, also carry stigma related to sexual orientation. As found in this study, women have higher negative mental health indicators, such as distress[27-28]. Also, several risk components can help to make this picture more dramatic and lasting: the lower rate of outness and perceived social support, which is usually associated with distress[29]; the higher score for family dysfunctionality, which compromises social support and the possibilities of developing a healthy and open relationship that includes LGBT+ identity[30], and; higher rates of neuroticism, which is associated in the literature with low coping and psychiatric symptoms[31].

Participants who were not in social isolation obtained lower perceived family acceptance. This follows the findings by Silva and Cerqueira-Santos[18] about the negative family climate for LGBT people in Brazil. The non-acceptance of the family may result in distancing from this group in an attempt to avoid conflict. The effects of family withdrawal are reviewed by Katz-Wise, Rosario, and Tsappis[32], who alert to consequences in terms of LGBT identity itself and mental health problems.

One of the most important data from this research is that, different from what was raised as a hypothesis and from what other research has shown, in this Brazilian sample, being in social isolation with the family or not was not associated with the distress levels of these young people. This variable was not significant either in the predictive model of distress applied in this study. Being in social isolation with the family may be indirectly associated with distress though, as the participants in this condition presented higher scores in the negative LGBT identity, strongly influenced by the subject's intimate relationships and the cultural conception of their social nucleus[30]; in family dysfunctionality; and in neuroticism[31]. These factors can be considered risky for mental health[27]. Also, they presented lower scores in elements that can be considered protective, such as outness, perceived social support, and perceived family acceptance. Thus, although this study did not find direct relationships between social isolation with the family and distress levels, it was related to risk factors and less present in factors considered protective, which could indicate an indirect relationship.

The distress was moderately and positively associated with neuroticism and family dysfunctionality. The latter was moderately and negatively associated with the perception of social support and family acceptance. Studies point to the negative effects of low social support and family acceptance on young LGBT people, compromising their identity process, their mental health, and exposure to risks and other forms of violence[32]. The moderate and negative correlation between outness and perceived family acceptance reinforces the analyze presented above regarding the relationship of the family with LGBT+ identity. The tendency that the greater the outness, the lower the perceived family acceptance may be related to negative experiences these young people have already experienced due to their outness process.

Despite this, outness was not a significant variable in the prediction model of distress. They were: negative LGBT identity, perceived social support and family acceptance, family dysfunctionality, and gender. The model found indicates variables that are already predictors of distress for the LGBT population even in the

pre-pandemic period, confirming what has been pointed out in several studies[33-34]. These are elements that may have been exacerbated by social isolation[9, 11].

Distress should be interpreted as an important indicator of psychological suffering for these young people, and may represent possible diagnoses of psychological disorders such as anxiety and depression. The only association raised by the regression that escapes a little from what was expected is the positive association between perceived family acceptance and distress, contrary to the correlation, which indicated a negative association between the constructs. However, it is necessary to remember that in the regression, the associations are carried out together, which can favor the overlapping of some factors, such as greater social isolation of those with greater perceived family acceptance, as also highlighted in the results. In other words, the interpretation of this result needs to be intertwined and networked. It is important to highlight that the survey of distress predictors should be seen as a guide for action and counseling in mental health.

Conclusions

The limitations of this study include restricted access to a larger and more diverse group of young people, as data collection was carried out online and not all young people in Brazil have access to the Internet. Precisely through online contact, a sample of the majority of students was also obtained. The emergency situation of social isolation also did not allow the creation of a control group for comparison. The policy of social isolation was stricter during data collection, with no prospects of completion. This context may also have exacerbated some conditions experienced by the young people accessed in this study. Another relevant limitation refers to the low number of trans people in the sample, making it difficult to understand the scenario and make comparisons and generalizations when it comes to this specific population. Finally, Brazilian cultural diversity limits the possibility of treating the effects of the pandemic in a generalized way, alerting that caution is needed in the interpretation and expansion of results to specific subgroups.

Evidence points to the fact that the covid-19 pandemic has probably increased the already high risks for LGBT youth in various parts of the world, with drug use, family conflicts, the experience of prejudice and violence in various contexts. These data reinforce the need for increased investment in reducing prejudice against sexual minorities, in addition to the refinement of care systems such as health and social services. Vulnerable young people cannot wait for the COVID-19 pandemic to mitigate to have their increased risks addressed and their emotional and physical security needs met.

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