

# SARS-CoV-2 in Brazil and Psychosocial Repercussions on Men's Health: Health Literacy Is Important

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## Abstract

This study aimed at analyzing the psychosocial repercussions of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) pandemic on the health of men living in Brazil. For this, we carried out a socio-historical and qualitative study, with the participation of 200 men who answered an online questionnaire. The data collected were processed in the NVIVO 12® software, structured by the Collective Subject Discourse method, and analyzed from the epidemic disease theoretical framework proposed by Charles Rosenberg. Our results showed that the SARS-CoV-2 pandemic brought about repercussions of different dimensions that compromised the health of men living in Brazil. The repercussions evidenced were behavioral changes and emergence of new habits due to the pandemic; uncomfortable family situations; impaired affective and sexual relationships; harms in marital relationships; and insecurity and psychological distress. It is important to implement strategies that maximize men's health literacy, promoting better communication in terms of health, and search for help and suitable information about health/mental health.

## Keywords

pandemics, coronavirus infections, men's health, masculinity, health literacy, psychosocial impact

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## Introduction

The Coronavirus Disease 2019 (COVID-19), caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), has killed more men than women (Conti et al., 2020), as first observed in China (La Vignera et al., 2020), the country where the pandemic originated, and later on in European countries such as France, Germany, Italy and Spain (World Health Organization, 2020a). Brazil has a similar epidemiological behavior (Ministério

da Saúde, 2022; de Sousa, Cerqueira, et al., 2022). According to data from the Ministry of Health, 53% of the deaths due to COVID-19 correspond to male individuals (Ministério da Saúde, 2022). Moreover, it is necessary to consider that the Brazilian population older than 60 years, the age group with the highest mortality due to the disease (Conti & Younes, 2020; Wu et al., 2020), consists of approximately four million more women than men (Instituto Brasileiro de Geografia e Estatística, 2020), which confirms maintenance of the worldwide



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pattern of male morbidity and mortality due to other causes, such as external ones, cardiovascular and respiratory diseases, and tumors (Beltrán-Sánchez et al., 2015; Ministério da Saúde, 2018).

Currently, a number of studies aim at identifying the determinants that drive higher mortality rates due to COVID-19 in the male population, suggesting that factors associated with lifestyle, such as smoking and alcoholism, and the delay in seeking health services may be involved (World Health Organization, 2020a, 2020b), in addition to biological vulnerability factors that may also be associated (Alwani et al., 2021; de Sousa, Teixeira, et al., 2022; White & Kirby, 2020; Wray & Arrowsmith, 2021).

The situation is complex and represents a cataclysm that causes psychosocial repercussions of different dimensions for men's quality of life, well-being, and physical and mental health status, requiring investigation and consideration of its impacts (Ornell, Schuch, et al., 2020). Recent evidence shows that men experienced high rates of common mental disorders due to the pandemic scenario (de Sousa, Teixeira, et al., 2022; de Sousa, Teixeira, et al., 2021; Morgan et al., 2021; Teixeira et al., 2022). Traits of hegemonic masculinity were associated with a higher degree of illness, causing physical, social, and mental harms, characterized as psychosocial repercussions (de Sousa, Moreira, et al., 2022).

For being a new phenomenon that demarcates a new social history, the COVID-19 pandemic involves a situation consisting of representative acts that exert psychosocial effects on those that experience the arrival of epidemic disease (Rosenberg, 1993). This unexpected and unprecedented moment, accompanied by myths and disinformation, demands higher health literacy levels in people, as it is probable that these individuals have a better perception of the diverse information in terms of health. Health literacy has proved to be a protective factor for health/mental health (Jorm, 2012; Nguyen et al., 2020; Paakkari & Okan, 2020; Sentell et al., 2020).

In a literature review, we observed an increasing number of international studies focused only on epidemiological aspects related to men's mental health (Adamyan et al., 2022; Ahrenfeldt et al., 2021; Al-Sejari &

Al-Kandari, 2022; Kamalov et al., 2021; Simpson et al., 2022). In addition, to the present day, few studies have been published that explore the need to understand the dynamics of the experiences presented in pandemic contexts and their relationship with human health (Wilson et al., 2022), with a considerable gap in scientific evidence in Latin American countries, such as Brazil. Thus, the research question is as follows: Which are the psychosocial repercussions of the pandemic on the health of men living in Brazil and which strategies can be implemented to reduce the impacts? Therefore, this study aimed at analyzing the psychosocial repercussions of the SARS-CoV-2 pandemic on the health of men living in Brazil.

## Method

### Design

A socio-historical and qualitative study that proposes to articulate empirical stances, abstractions, subjectivities, and idealisms together with dialectical structures and verbal interaction, seeking to understand the subjects and the social context (Freitas, 2002). Research studies with a historical perspective seek to establish the relationships and explanations of behaviors considering their social insertion, which allows unveiling new evidence and recovering critical dimensions of socio-historical facts and discourses constructed about them (Padilha et al., 2017).

### Scenario and Participants

The study was carried out in a virtual environment, in all 26 Brazilian states, and in the Federal District between June and September 2020, a period in which social restriction measures were established, recommended by governmental and health authorities to control the spread of the COVID-19 disease.

To participate in the study, the men had to meet the following inclusion criteria: living in Brazil, age more than 18 years old, and with access and ability to use Information and Communication Technology (ICT)

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resources, which would allow them to answer the online form. We defined the following exclusion criteria: being a man in transit in Brazil during the research, such as those who were in a situation of international travel coming from other countries. For social isolation reasons, the research team had no direct link or personal encounters with the participants but had extensive experience on the research topic and the methodology used.

The participants were invited by sending the survey link accompanied by the Free and Informed Consent Form to consent to participate in the survey, which was facilitated by digital social networks such as Facebook®, Instagram®, and WhatsApp®, following a method consolidated by other studies in the literature with this population segment (Ali et al., 2020). For that, the Snowball technique was applied as a strategy of consecutive recruitment of participants, data repetitions, configuration of reference chains—"seeds"—and exploratory apprehension of theoretical chain sampling (Biernacki & Waldorf, 1981). The men were instructed to invite other men from their social network (without interference from the researchers) until a significant sample was obtained.

The theoretical sample consisted of speeches by 200 male participants. The speeches were apprehended from the frequency of appearance of similar meanings and central ideas and subsequent internal validation of the findings revealed (Fontanella & Magdaleno Júnior, 2012).

### **Data Collection and Analysis**

Data collection was carried out by applying a semi-structured form hosted on a digital platform provided by Google Forms®, from the creation of a personalized layout, as described in the figure: Individual invitations were carried out respecting the participants' privacy. The form used consisted of 35 closed questions and two open questions related to sociodemographic, occupational, and health data, which allowed characterizing the participants as well as attitudes and strategies to face the pandemic, and emotions and feelings most triggered after the beginning of the pandemic. In this study, findings were extracted from open-ended questions, namely: Tell us about your experiences in the COVID-19 pandemic context; Tell us about your health situation in the COVID-19 pandemic context; Describe the emotions and feelings that represent your experience before the COVID-19 pandemic; and Point out the main problems faced after emergence of the COVID-19 pandemic.

Data collection and management followed specific data security and protection criteria established by the Google Forms® platform and adopted by the research team, namely, maintenance of anonymity, confidentiality, reliability, and use of protected codes and folders.

The data collected were organized by two researchers and processed in the NVIVO12® software program (Hilal & Alabri, 2013) belonging to a member of the research group. In all the research stages, the consolidated criteria for reporting qualitative research were met (Souza et al., 2021) to preserve the rigor of qualitative scientific research.

The methodological analysis was structured in the Collective Subject Discourse (CSD), which allowed extracting and retrieving collective discourses in a qualitative way to present the social representations of the phenomenon under study (Lefebvre & Lefebvre, 2003). The methodological structure consists of the following steps: full transcription of the testimonies; separation of meaningful excerpts; organization of sets of excerpts; identification of Key Expressions (KEs) or figurative elements; junction of KEs; and configuration of singular collective discourses, written in the first person singular and consisting of individual thoughts of the study group participants. Subsequently, the group of researchers involved in the analysis process evaluated and validated the Central Ideas (CIs) and the Anchors, and wrote and constructed the synthesis discourses, naming and categorizing them, and giving them the title of Collective Subject Discourse.

After the methodological analysis, in which the data were coded, we proceeded to the theoretical analysis and/or interpretation of the material, in line with socio-historical research, supported by the epidemic disease framework proposed by Charles Rosenberg, from the work entitled "Explaining epidemics and other studies in the history of Medicine" (Rosenberg, 1993). The framework chosen proposes a panorama of the disease that is revealed in four characteristic and defining acts that are apparent in pandemics, namely: 01—progressive revelation; 02—management of randomness; 03—negotiation of the public response; and 04—subsidence and retrospection (Rosenberg, 1993); consequently, it demarcates how these acts produce psychosocial repercussions on the subjects who experience them.

### **Ethical Aspects**

The research project was approved by the Research Ethics Committee, meeting all national and international standards of ethics in research involving human beings.

### **Results**

The participants were men aged between 18 and 67 years old, mostly living in northeastern Brazil (72.3%), with cisgender identity (93.6%), homosexual identity (47.7%), self-reported brown race/skin color (39.3%), and Complete Higher Education (66.7%). The majority reported living in masonry homes (67.45%), with

non-elderly relatives (21.95%), and with an approximate income of around five minimum wages (33.2%). Of these, 18 self-reported having tested positive for SARS-CoV-2.

Regarding the characteristics of the men's experiences in the pandemic context, the situations that most generate concern in them were as follows: compliance with distancing from social contact and interaction, the economic situation, the work situation, lack of physical activity, health status/situation, family situation, and sexual inactivity. The most frequently triggered feelings that best defined the experience during the pandemic by men were the following: anxiety, apprehension, insecurity, restlessness, instability, fear, stress, responsibility, acceptance, agony, boredom, and longing.

Most of the participants reported not having conducted searches for care/support to face the pandemic. Among those who positively stated conducting such searches, the following stood out: search for support from family members and friends; churches, yards, religious centers; Health Surveillance; Basic Health Unit (BHU); Municipal Health Department (MHD), and Telephone Support service offered by the Ministry of Health.

The following strategies were among the ones most adopted by men to facilitate coping with the pandemic: internet access, access to digital social networks (Facebook® and Instagram®), watching movies and series on television, listening to music, reading, performing household chores, and engaging in work activities. In turn, the practices adopted more than usually in the pandemic context investigated were the following: accessing the internet, eating, sleeping, watching/reading media (TV, newspapers), staying more with the family, having sex and/or sexual practices, and consuming alcohol and other drugs.

The men surveyed described not having purchased food for stock/supply in the pandemic context. Moreover, among the most adopted pandemic coping measures were the following: hand washing and hygiene, social distancing, use of gel alcohol, body hygiene, hygiene of the home environment, food hygiene, use of individual protective masks, and care for pets.

They evaluated the prevention measures against COVID-19 determined by the health authorities as extremely necessary. In addition, they reported the adoption of new habits and care behaviors for their health in the pandemic context.

The analytical basis of CSD allowed anchoring the "central ideas" that support the explanation in which the psychosocial repercussions for men's health were triggered from the emergence of the characteristic acts of the COVID-19 framework in Brazil in a homogeneous way. Thus, seven central ideas comprise the synthesis discourses listed below.

### ***Central Idea 01: Changes in Habits and Behaviors***

The first discourse revealed significant repercussions in the behavioral sphere regarding adoption of new habits and/or change of previous behaviors regulated by determinations of health authorities materialized in the recommendations and protocols:

... with emergence of the pandemic and due to quarantine and social distancing, I increased daily computer use, Internet access and interaction in social networks through digital means. I started watching movies and series. I've also been sleeping, eating and consuming more alcoholic beverages than before. I feel that my life is more sedentary because I spend most of the day sitting or lying down. I also started to take care of my house and increased the number of times I do house chores as a way to prevent myself against Coronavirus, which still raises doubts about whether I'm actually doing it properly. (Men's CSD)

### ***Central Idea 02: Interpersonal Repercussions Experienced in the Family, Affective, Marital, Sexual, and Work Aspects***

The second synthesis discourse expresses the interpersonal repercussions that reflect in different spheres, such as the family, affective and marital relationships, sexual life, and work. The uncomfortable family situation is highlighted from the repercussions imposed by social isolation:

... even though I try to be more connected to my family and more present in the day-to-day, I've felt that social isolation has intensified failure in communication and distancing of the ties with my relatives. In addition, conflicts became more frequent, mainly because they didn't adhere correctly to the recommendations determined by the health authorities. I also have a teenage daughter, but she doesn't live with me and, with the quarantine, I can't make periodic visits anymore. I try to close the gap between us, because now we don't hug or kiss and it affects me, because seeing her is good for me. (Men's CSD)

### ***Central Idea 03: Affective and Sexual Harms***

As a third synthesis discourse, men express being affected by the social isolation imposed by the pandemic and by the presence of harm in affective and sexual relationships, the most expressive aspect among single men:

... during this pandemic period I've been welcomed by my girlfriend, but even so the pandemic affected our moments together, because we reduced the intensity of physical contact and, consequently, had fewer sexual encounters. Besides, the fact that we don't live together has hurt our intimacy and our feelings. (Men's CSD)

### **Central Idea 04: Marital Conflicts**

Configured as the fourth synthesis discourse, conflicts in marital relationships emerged in the men's discourses, especially heterosexual men, from which they show the occurrence of conflicts with their partners, precipitated and intensified by the quarantine:

... after the beginning of the quarantine, I started to stay home all the time and I've been in contact almost 24 hours a day with my wife, which has led us to conflicts at least once a day, a situation that didn't happen normally. These constant conflicts have made our relationship more unpleasant and uncomfortable. (Men's CSD)

### **Central Idea 05: Work Vulnerabilities**

As a fifth synthesis discourse, there is a need to maintain work activities during the course of the SARS-CoV-2 pandemic in Brazil, which places men in a situation of insecurity and vulnerability in the performance of their functions, as presented below:

... even with the emergence of the pandemic, I keep working because I work in an area considered essential and, even using Personal Protective Equipment, I feel exposed and unsafe. This insecurity also appears because I share the work environment with several colleagues and thus identify numerous inadequacies related to prevention measures in my workplace. In addition, I face lack of inputs to ensure control and safety for the protection of workers, such as the difficulties performing tests to know who of those that work with me has Coronavirus. (Men's CSD)

### **Central Idea 06: Feelings and Mental Health**

Added to a set of factors, the sixth synthesis discourse evidenced the advent of repercussions on mental health predisposed by the installation of feelings of fear, insecurity, and revolt, caused by social insecurity, xenophobia, stigmas, ideological and political party conflicts, and formulation of Conspiracy theories:

... this pandemic in Brazil has generated dissatisfaction and insecurity with the way the President behaves publicly, in relation to the coronavirus. I'm disgusted that he's against science and universities, taking advantage of the moment to make cuts in student funding grants. Moreover, I feel affected by the wave of prejudice and discrimination against COVID-19, when I realize the association made to China as guilty. This social situation leaves me dejected, confused and with a feeling of uncertainty when I see so much false information being transmitted, in which most of it is contrary to the Ministry of Health and the World Health Organization, leading me not to believe in existence or severity of the disease. With all this, I feel even more angry, nervous and afraid of what might happen. (Men's CSD)

### **Central Idea 07: Mental Illness Signs and Symptoms**

The seventh synthesis discourse represents the emergence of repercussions inherent to the intrapersonal sphere, which refers to the increase in the emergence of psychological distress indicators, in a progressive fashion, expressed by somatization associated with high anxiety, stress, and depression levels, which compromise psychological well-being and make subjects vulnerable to mental illness:

... with the arrival of the pandemic in Brazil and due to the quarantine measures, I had to stay home for fear of what was coming. I began to feel frustrated and powerless, and vulnerable as a soldier in the midst of a war. I realized that my mental health was affected, because I began to get more stressed, developed anxiety and insomnia and started to have nightmares destabilizing me emotionally. As the days went by, I lost the will to eat and to maintain home hygiene. I've been ripping strands from my hair and beard when I'm in tense moments. I also started to feel muscle and joint pain in my hands and I've had depressive symptoms and felt that my dopamine levels have decreased, also affecting my mood and self-esteem. Due to the situation I'm going through, I woke up to conduct a search for psychological and psychiatric care, which is still uncertain, as I don't know if I will be able to access a medical appointment during the pandemic. (Men's CSD)

## **Discussion**

This study was able to analyze the psychosocial repercussions of the SARS-CoV-2 pandemic on the health of men living in Brazil from the theoretical perspective of the COVID-19 epidemic disease framework. From the repercussions experienced, the men's collective discourse explained the characteristic epidemic phenomena that comprise the four dramatic acts marking the framework in the context under study.

The SARS-CoV-2 pandemic in Brazil has imposed psychosocial repercussions on men's health, producing significant changes in life habits through social, professional, and family restrictions, limiting them to prolonged home living, significantly altering their lifestyle. Progression of the pandemic has generated disharmony and uncomfortable situations in men's family and affective marital and sexual relationships. Added to these repercussions, it has caused social and work insecurity and altered the performance of daily professional functions, in addition to producing feelings of uncertainty, which drives greater vulnerability to the emergence of psychological distress, an aspect seen in the discourses analyzed through anxiogenic and depressive signs and symptoms.

The advent of a pandemic is accompanied by a cataclysm of major proportions, as seen in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Viral diseases, phenomena with peculiar characteristics, became apparent and demarcated the socio-historical pandemic contexts over the years. According to the framework we adopted, these phenomena are compared by Rosenberg to drama plays, unfolded in figurative acts, which comprise the epidemic disease framework, namely: progressive revelation; attempt at an explanation; negotiation and/or collective response; and reflection built on the experience, to draw lessons from this event (Rosenberg & Mantovani, 2016; Rosenberg, 1993). These acts are updated over time and across generations, forming new perceptions about other epidemic events (Rosenberg, 1993), as currently seen with COVID-19. This theoretical approach addressed by the health historian contributes to the recognition of phenomena caused by epidemic diseases over the years as well as it confers greater specificity to male behavioral analysis before the arrival of a new disease.

Specifically, with the arrival of the pandemic in Brazil, socio-historical phenomena reveal the beginning of Rosenberg's first drama act, progressive revelation (Rosenberg, 1993), where the existence of the outbreak implies a threat to specific interests and not only individual ones, with repercussions on the social context in which these men are inserted. In this process, at first, the discourse revealed that the disease was seen as something distant, a failure of imagination, as was the case in previous pandemics, in which the male population did not recognize the possible threats that the disease could generate, which gives rise to socio-historical milestones, such as engaging in negative attitudes that rejected and discredited the recommendations made by specialists and science (Barreto et al., 2020; Silva, 2020).

Considering this design, it is possible to understand how the male population has been influenced and reacted, in this case, to the COVID-19 pandemic. This understanding can be visualized through the "configuration" element (Rosenberg, 1993; Rosenberg & Mantovani, 2016), thus named by Rosenberg in his conceptual theoretical framework. From this element, it is possible to locate in the study the intimidating, warning, and frightening character caused by COVID-19 among men, materialized in the real and close recognition of economic risk, in the collapse of the health system, and in the impairment of quality-of-life integrity, as also observed in the Chinese context among the general population (Y. Zhang & Ma, 2020).

With the emergence of the abrupt transformations generated by the COVID-19 Phenomenon, which accompany Rosenberg's first act, habits were changed due to confinement, which required certain adaptations as well

as the incorporation of new behaviors before the "new" lifestyle.

Starting from the framework proposed by Rosenberg, and with the objective of determining how men behave in the face of the COVID-19 pandemic in Brazil, it is important to consider that the epidemic disease is wrapped up in certain explanations characterized as mechanisms that are established around the definitions and responses attributed by the public opinion to the disease and its complexity, which may confer legitimacy and indicate a direction for decision-making in the context experienced (Rosenberg, 1993; Rosenberg & Mantovani, 2016). This situation expresses the emergence of "management of randomness," which can also be read as an "explanation" attempt, in which the second characteristic act of the COVID-19 framework materializes. At this moment, responsibility is sought in some person: people and countries are guilty and borders are closed, intensifying the psychosocial repercussions on people's health.

Both in Brazil and in China, in addition to modifying the individual male daily dynamics, the progression of the COVID-19 pandemic has altered family dynamics; and the presence of situations that generate fear, hysteria, confrontation, increased financial expenses, and blocking of social, affective, and sexual contact is frequent (Cito et al., 2021; Dantas et al., 2021; Purdie et al., 2020). Harms to family planning, domestic and intrafamily violence, child marriage, and child abuse are also already observed among family conformations and environments throughout the pandemic (Campbell, 2020; Jackson Fiho et al., 2020; Recto & Lesser, 2021), which draws the attention of health authorities and organizations worldwide to ensure preservation of human rights and minimization of social and family impacts.

Men's longer permanence in their homes was configured as a fact that generates marital conflicts. Therefore, the male discourse, elucidated by the group of men who referred to themselves as cisgender and heterosexual, expresses tensions and disharmony in marital relationships, which raises attention to implementing interventions directed to marital coping in pandemic contexts. These findings presented differences in relation to the group of men with transgender, nonbinary, and homosexual sexual identities that did not present repercussions of this nature in their discourse, which implies the need to direct the attention to those men whose masculinities have sexual and gender diversity markers.

No divergent results in the other Central Ideas were evidenced in the discourses from this identity group of cisgender and heterosexual, trans and homosexual men, mainly in relation to establishing affective and marital relationships. In addition to that, it is important to note the fact that gay and trans men might have already been experiencing greater vulnerability before the emergence

of the COVID-19 pandemic for reasons related to homophobia and transphobia, due to other experiences of intrafamily violence and to social spaces, which even favor difficulties seeking help and access to health services by LGBTQIA+ men (Camargo et al., 2021; D'Angelo et al., 2021; Pan et al., 2021), requiring careful analysis to promote strategies that ensure survival, safety, and minimization of the psychosocial impacts in this population segment.

In an attempt to face the problems that arise around the pandemic event, the discourses revealed repercussions as consequences of elements that configure the third act, which is characteristic of the “negotiation and/or response” given by the population to the COVID-19 pandemic. In this act, the repercussions are already more noticeable, and the progression of the disease and the need to comply with restrictive measures such as the quarantine are already inevitable (Rosenberg, 1993). Thus, in this study, the male discourse evidences the mobilization of the men under study in the performance of care practices focused on minimizing the repercussions generated by COVID-19 on affective and family relationships.

Due to the scenario marked by psychosocial repercussions of a marital and family order driven by the COVID-19 pandemic in Brazil, aspects such as forced marital and parental coexistence, economic stress, and fear of viral contamination intensify marital and family problems (Oliveira et al., 2020; Recto & Lesser, 2021), making it urgent to adopt measures aimed at a culture of peace and nonviolence among the male population. In view of the problem revealed in this study, it is important to highlight the emergence of actions for a peaceful resolution of marital conflicts, measures to ensure protection for women, and the construction of masculinity references based on a culture of peace (Marques et al., 2020).

Specifically, concerning the work dimension, the situation of the work performed by men has been permeated by weaknesses in the implementation of effective measures to prevent diseases and protect occupational health, making them more exposed and, consequently, more vulnerable to contamination and negatively affecting their physical and mental well-being (Barreto et al., 2020; Haleem et al., 2020; Y. Zhang & Ma, 2020).

The discourse revealed that there are also weaknesses in sanitary control of the disease by labor institutions, showing a deficit in the supply of Personal Protective Equipment and lack of tests to detect SARS-CoV-2, a factor that contributes to predisposition to the COVID-19 disease. These findings denounce the need to expand social protection and health actions in the institutional spheres of the world of work, guaranteeing workers' rights to health.

In addition to the psychosocial repercussions involved in the work dimension, the study also showed that there are social repercussions arising from the installed social insecurity, such as exposure to political conflicts associated with crises in the government, dissemination of false information, and formulation of Conspiracy theories, exposing men to forces contrary to those aimed at preventive care (Bilewicz et al., 2019; Guedes et al., 2021; *The Lancet*, 2020).

It is important to note that, in the context of an epidemic disease, recognizing factors that generate repercussions, such as those identified by the men in the professional practice, points to what Rosenberg called “social management” of the disease (Rosenberg, 1993; Rosenberg & Mantovani, 2016). Thus, this finding implies the need to strengthen strategies that enhance men's health literacy levels, considering that such higher levels will enable a better perception of the diverse information in terms of health, increasing the search for help, in addition to being a factor that promotes mental health management and protection (Jorm, 2012; Nguyen et al., 2020; Paakkari & Okan, 2020; Sentell et al., 2020).

An increase in the risk of suicide, intensified by social isolation, job loss, unemployment, and financial stress, has been observed in countries such as Bangladesh, Colombia, India, Canada, and New Zealand, where phenomena that are characteristic of pandemic contexts such as xenophobia, stigma, and fear of contagion potentiate installation of a devastating scenario that deserves attention from public managers, public policy makers, international organizations, and health professionals working at different levels of the care networks (Chakraborty, 2020; Gonzalez-Diaz et al., 2020; Mamun & Griffiths, 2020; Ograniczuk et al., 2021). To minimize the incidence of these repercussions, several countries established, in advance, coping strategies that have been successful in preventing anxiety disorders, reducing the impacts caused by isolation, such as loneliness and the fight against sedentary lifestyles (Barreto et al., 2020; de Sousa, Teixeira, et al., 2022; de Sousa, Alves, et al., 2021; Moreira et al., 2021; Teixeira et al., 2022).

It is also worth noting that, during this difficult and unprecedented period, men mobilized to develop coping strategies to manage and protect their mental health (de Sousa, Alves, et al., 2021). In this sense, the literature reveals a variety of strategies, both positive and negative. The negative strategies are linked to the traditional male rules, where men tend to complain less, deny pain and weakness, and conceal physical and psychoemotional frailty, which, added to the stigmatizing beliefs in relation to mental health, contribute to men seeking help and/or health services to a lesser extent (Pfefferbaum & North, 2020; Seidler et al., 2016; Spendelow & Seidler, 2020).

It is understood that the population's stigmatizing beliefs about mental health can affect the search for help from other people. There are more chances to obtain professional help for mental health issues when another person recommends that such help be sought; therefore, the opinions either by close or by distant people can also be influential (Jorm, 2012; Moreira et al., 2022). In addition to that, it can be associated with closure and/or minimization in the operation of many health services on which many men depend, such as mental health services or support services for alcohol/drugs/sexually transmitted infections (Santos et al., 2021).

In relation to the positive strategies, a number of studies showed that preservation of social ties, even if virtual, made men less prone to presenting depression and anxiety symptoms, reinforcing the need for interventions aimed at promoting health literacy, connectivity, and social support for men to help minimize some psychosocial problems, such as impacts induced by COVID-19 (Moreira et al., 2021; Moura et al., 2022; Nguyen et al., 2020; Paakkari & Okan, 2020; Sentell et al., 2020; Simpson et al., 2022).

The repercussions related to the fourth and final act, represented by subsidence and retrospection, can be observed in the post-pandemic period. Such consequences emerge from the reduced number of cases and, therefore, from a lower rate of spread of the disease, a phenomenon that is currently occurring, and it is important that this aspect be explored in future studies.

It is clear that we do not fail to recognize the possible limitations of this study. On the one hand, as social networks and the Snowball method were used to constitute the sample universe for collection, we know that the data may be concentrated in certain audiences where this information circulated, and that a selection bias may have occurred. On the contrary, we understand that the need for mastery of the online platform and a minimum of literacy to access it are elements that may have excluded subjects with low educational levels. We also believe that the perception and psychosocial repercussions may change according to the course of the pandemic and its progression, longitudinal studies being necessary to evaluate this finding.

## Conclusion

Based on the socio-historical perspective, we analyzed the psychosocial repercussions of the SARS-CoV-2 pandemic on the health of men living in Brazil. We evidenced behavioral changes and emergence of new habits; uncomfortable family situations; impaired affective and sexual relationships; harms in marital relationships; insecurity; and psychological distress. Men have difficulties seeking help and accessing to and being contacted

by health services, and the COVID-19 pandemic does not seem to contribute in a positive way to changes in this scenario.

This study contributes to knowing a health phenomenon of global complexity and interest as well as it elucidates the specificities of the male population group in a Latin American context, also considered the epicenter of the disease. It is suggested to implement public health strategic interventions to promote health literacy, which may come to reduce the psychosocial repercussion generated by the pandemic in men's health.

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## Supplemental Material

Supplemental material for this article is available online.

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