Mental health of female sex workers in the COVID-19 pandemic: stressors and coping strategies

Abstract The objective was to analyze the coping strategies adopted by female sex workers in the face of stressors resulting from the COVID-19 pandemic. Qualitative study supported by Systems and Coping theories. An in-depth interview was carried out with 30 sex workers from the Alto Sertão Produtivo Baiano between September and October 2020. The narratives were submitted to the resources of hermeneutics-dialectic to organize the categories. Four categories make reference to the system’s stressors: negative feelings of fear, anxiety and difficulties in sleeping with the uncertainties in the face of the pandemic; concern about personal and family support; irritability in the face of conflicts; anxieties and insecurities with working conditions. Five categories allude to coping: strategies focused on the problem (pandemic); reframing and regulation of emotions; spirituality and religiosity; support networks and social support; use of medications. Stressors arise as a result of sexual service experiences combined with the pandemic situation with reduced customers and income, leading to the development of negative feelings and emotions. However, coping strategies are diverse and they women made effort to deal with problems and to balance their mental health.

Key words Sex Professionals, Mental health, Nursing Theory, Coping strategies, Pandemics

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Introduction

The COVID-19 pandemic has remained latent around the world with the evolution of multiple strains of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and aggravation of the disease among different population groups. The advance of the virus and its consequences go beyond aspects related to the health-disease process, impacting the social, cultural, political and economic dynamics of populations in situations made vulnerable by adverse and unfair living conditions.

Such situations potentiate damages that make it difficult to obtain quality of life and well-being, as well as to face the pandemic and adopt preventive measures. Latin American countries and, in this study, Brazil (with marked social inequalities) have adopted dubious strategies that differ from those of the World Health Organization (OMS), potentiating a political-economic crisis. Thus, there is an increase in the rate of morbidity and mortality in vulnerable people, such as sex workers, whose rulers tend to perpetuate intersectional (e.g. gender, race, class, migratory) inequities.

The concept of vulnerability goes beyond and breaks with the notion of risk or risky behavior, as it points to exposure to diseases and breaks with the ideal of accountability and culpability the people as responsible for their illness. The term was thought a posteriori the beginning of the AIDS pandemic, to understand the context and situations of illness of social groups, in addition to personal behaviors and practices. Later, the term was also used to understand the contexts of other causes of illness.

Thus, thinking about vulnerability is to bring to light that social and public aspects, such as public policies and services offered by the State, contribute both to the presence of obstacles that interfere with the health-disease process of population groups, as well as the production of responses and coping with such situations.

It is noteworthy that the National Policy for Integral Attention to Women’s Health (PNAISM) provides a holistic view of women’s health and, therefore, could be useful to promote the health of sex workers. However, the PNAISM does not foresee the inclusion of this group in its core and discussions, as it neglects the specificities that they have in this work activity: actions of education and health promotion, prevention of diseases and injuries aimed at this occupational practice.

Vulnerable situations may also reside in the fact that, although prostitution is a profession recognized by the Ministry of Labor and Employment (MLE) since 2002 with the inclusion of the expression ‘sex worker’ in the Brazilian Classification of Occupations of the MLE, some experiences are condemned by the Brazilian penal code, such as commercial activities linked to the sex market (such as prostitution houses), increasing labor insecurity and illegal exploitation by pimps. Furthermore, the new labor reform foresees even more deleterious changes for any working class and will be even more harmful for sex workers, who already suffer from the exclusion and invisibility practiced by the State.

It is noteworthy that sex work, under the bias of progressive feminist theorists, is understood as a labor activity, being a paid and consented sexual practice, in which there is an exchange of sexual pleasure (of the client) for income or other means that allow the women included in this practical way of livelihood/subsistence, evidenced in studies both in Brazil and in European countries, such as France, where this understanding also exists.

However, the consensual paid sex market, as well as the women’s confrontation with the problems arising in the exercise of this profession, is marginalized in several nations, such as Brazil, as well as African and Asian countries (such as Malaysia), because many of them break with the naturalization of the social construction of the expected behavior for women. Otherwise, marginalization, sociocultural and state exclusion, as well as exposure to different situations that interfere in the health-disease process, intensify as governments refuse to think about and implement public policies focused on this group of women.

Public policies are necessary to reduce the transmission chain of the SARS-CoV-2 coronavirus and not to overload/smother health systems, as they have favored an increase in the mortality rate in groups in situations that make them vulnerable. Sex workers have already suffered from vulnerable situations, since the period before the pandemic and exacerbated by it, such as social stigmas, invisibility, a sudden drop in the number of clients, as well as the reduction of income to almost zero, which makes survival difficult.

Allied to this situation, the fear of contamination tends to generate negative feelings, anxieties, anguish and fear, psycho-emotional stressors that affect mental health.

Thus, it is essential that, in addition to understanding the measures adopted, with a view to mitigating transmission, it is necessary to ver-
ify the coping strategies used by sex workers for psycho-emotional stressors, potentiated during the pandemic. Therefore, the Nursing Theory proposed by Betty Neuman, which deals with Systems, approaches the object under study, as it is important for the analysis of stressors, that is, the forces that stimulate people's energy system (sexual workers) in the three stressor dimensions (intrapersonal, interpersonal and extrapersonal) and the environment in which it is inserted. In addition to the stressors, the theoretical component of Coping allows for the understanding of care actions adopted to cope with and manage stressors, whether focusing on the problem or focusing on emotions. Coping will refer to cognitive-behavioral actions used to adapt and control injuries and problems, such as events arising from and caused by the COVID-19 pandemic.

In this way, this study has the possibility of pointing out ways for health professionals to rethink the care of female sex workers, focused on their needs, demands and understandings, in order to contribute to a praxis congruent with the promotion of mental health, with a perspective that extrapolates the treatment and prevention of sexually transmitted infections (STI) and the human immunodeficiency virus (HIV). In addition, the needs and complicating factors of mental health may reverberate in the development of taxonomies consistent with nursing diagnoses, contributing to the theoretical development of the science of care, which is important in health promotion and disease prevention.

Furthermore, the following guiding questions were outlined: What are the stressors that affected sex workers during the COVID-19 pandemic? What Coping strategies have been adopted by sex workers in the face of stressors during the pandemic? To assist in the answers to such questions, the objective was to analyze the Coping strategies adopted by sex workers for the stressors resulting from the COVID-19 pandemic.

Methods

This is a qualitative study based on the theoretical frameworks of Betty Neuman’s Theory of Systems and Coping. The theory proposed by Neuman involves Mental Health and Nursing and proposes a model to relate the holistic positioning of the individual, which is seen as an open system in constant interaction with the environment, from which multidimensional stressors originate. The system is dynamic because it has a direct and continuous relationship with environmental stressors, resulting in three types of environments: internal (intrapersonal, with interaction within the person), external (both inter and extrapersonal, with interactions external to the individual) and created (originating from so that people know how to deal with stressors).

The created environment allows individuals to create a coping and defense mechanism called by the theory of protective coping systems, as a result of subjective protection (mental, affective and emotional) or even objectives developed by people. Coping’s theoretical framework complements the concepts proposed by Neuman, as it highlights both behavioral and cognitive efforts, which allow any human being to change and control internal and external factors that cause fatigue, negative feelings and anxiety.

The study was developed in the Alto Sertão Prodotivo Baiano, which has 19 municipalities and around 400,000 inhabitants. Meetings took place in reserved rooms in a hall of an evangelical church, in the locality where the various establishments are located – bars, restaurants, pensions and inns – used for women to meet with clients.

The eligibility criteria were: to be over 18 years old and to have been in the sexual service for at least 01 year (considering that the experience allows a broader view of the sexual service), as well as having the cognitive and auditory capacity to participate in the study. Therefore, 30 women who perform paid sexual services participated. Exclusion criteria were not applied because the selection of the sample (participants) occurred through invitations with the snowball technique, with the help of two Community Health Agents linked to a Testing and Counseling Center (TCC) who work in the region where the women work. The snowball technique is a participant recruitment technique used in qualitative research to delimit the number of participants by invitation when the use of sample calculation is not possible, thus resulting in a convenience sample.

Data collection was carried out by two of the researchers responsible for the study, individually, in reserved spaces, with each of the 30 participating sex workers, during the months of September and October 2020. We used a script composed of items for the sociodemographic characterization of the participants and three questions that guided the In-Depth Interview: “Tell me how the pandemic has been for you and
the factors that have interfered in your day-to-day, causing stress?”, “Tell me how has been your mental health in this pandemic period, your emotions and feelings in the face of adversity” and “Tell me which care actions you have taken to face the pandemic and the possible mental/emotional problems resulting from it”. The interviews with the participants had mean duration of 35 minutes each. The responses were recorded on a cell phone, and then transcribed in full in Microsoft Word 2016 software.

As the interviews were completed, on the same day the authors transcribed the participants’ statements in order to examine the data in its entirety and undertake an articulated immersion process, with a view to developing a facilitated understanding of logic and meanings of the narratives.

The structuring of the categories, produced after analyzing the participants’ narratives, was based on the theoretical-methodological propositions of hermeneutics-dialectics and their stages of data operationalization, to place the researcher in the context of social actors. Dialectical-hermeneutics contains three levels of interpretation, however, for this study, the second level was considered, which is based on the observation of the facts that emerged during the investigation, as well as individual narratives, subjective aspects, conducts, customs, behaviors and senses/meanings attributed to the object of study26-27, which favor the construction of categories.

The operationalization of the data occurred with the following stages: ordering of the data; data classification based on the convergences and divergences of the questions structured in the narratives, considered relevant for sex workers; groupings of speeches according to similarity of meaning units (through recurrence, expressiveness and relevance to the object); after data saturation, the categories were surveyed and themes from the meaning units were named; therefore, the final analysis made possible with the interpretations and articulations through the theoretical framework23-24, in this case the System and Coping frameworks.

During the entire process of operationalizing the research and writing the article, the authors followed all the standards and criteria for rigorous quality in qualitative studies, guided by the guidelines of the Consolidated Criteria for Reporting Qualitative Research (COREQ). The study was linked to an umbrella project, complied with Resolution 466/2012, of the National Health Council, being submitted and approved by the Research Ethics Committee at Guanambi Faculty under protocol number 2,007,080/2017. It should be noted that the Informed Consent Term (ICT) was applied. The participants gave their consent for the entire research process, including the moments before the interviews, such as observations and informal conversations, to be published. With a view to guaranteeing the anonymity of the participants and preserving their identities, codes were adopted to name them, the letters ‘SW’ (acronym for sex worker), followed by a number (example: SW 01).

Results

Among the 30 sex workers who contributed to the study, most were between 18 and 35 years old (78.26%), had a low level of education (53.62%), declared to be black (59.42%), Catholic (55.07%), had worked in this profession for less than five years (68.12%), were not satisfied with the profession (55.97%), used condoms in sexual intercourse (63.77%), and reported use of hormonal oral contraceptives (66.66%). However, a small portion (41.2%) revealed that they used psychoactive (controlled) drugs to treat mental health problems and an even smaller number (6.6%) indicated that they underwent therapy with a psychologist to control emotions and mental suffering. In order to contextualize the approach with the pandemic period, they were asked if they were receiving the financial emergency aid from the government for the pandemic period (“auxílio emergencial”) to the needy and low-income population; only 36.7% had access to this benefit.

It is noteworthy that associated with the description of the profile, from the observation and informal chat prior to the interviews and interaction with the sex workers (important stage demanded by the hermeneutics-dialectic), it was noticed that the majority are from the smaller cities and rural areas that make up the Alto Sertão Produtivo Baiano region; many of them married or divorced, who are in paid sex work in order to support themselves and their families. In addition, according to reports, they were abandoned by their companions and made it impossible, due to lack of financial resources, to maintain subsistence agriculture. They are assiduous visitors to the open-air markets, to coordinate sexual service with clients (mostly traders and sellers) and, in this way, they meet with them in rooms rented by the owners of houses and bars, which indirectly stimulate paid and consented sexual service. Regarding the financial emergency aid, many sex
workers did not receive or did not sign up for fear of having their profession discovered or because a family member had already signed up.

An addendum must be made to the observations regarding the detailing of this context in which they are inserted: for being a region whose patriarchal culture is strong and, the machismo that marks the relations established between men and women, sexuality still reigns in the imaginary as a practice aimed at obtaining male pleasure, which is encouraged to explore public spaces since adolescence and to relate to as many women as possible (in this sense, with sex workers) to “improve his sexual performance” and confirm to society the construct of masculinity: male, virile and heterosexual.

In addition, the fact that the interviews were carried out in a church hall does not allow pointing out that there is less prejudice in the region, which by the way maintains traditionalism, conservatism and Christian roots (Catholic and Evangelical). The TCC of the host municipality uses the church space, due to the ease of access for women, to develop preventive and health promotion actions, since this room is on one of the streets used as a point for sexual service. However, it can be inferred that there is greater coverage of the FHS, greater adherence of sex workers to preventive practices, fewer barriers to access the primary care network, which is one of the factors that can positively contribute to the formation of coping strategies, despite the negligence of the State. Results of other study with sex workers from the Alto Sertão Produtivo Baiano have already presented data that confirm the perception of the authors of the present article.

Some meanings were congruent with the narratives and their daily lives (described or observed), presenting similarities that allowed convergences for the inference of subjective dimensions organized and operationalized by the hermeneutics-dialectic, which originated thematic categories of analysis, which refer to the understanding that the workers have on the stressors during the pandemic and the strategies used to face problems and overcome mental health problems.

Regarding the stressors of the three systems (intra, inter and extra personal) pointed out by the Systems, four thematic categories emerged, organized in Chart 1, whose themes refer to the experience of sexual service, while women, poor, living in a deprived and far from the great centers of the country, whose pandemic has potentiated negative feelings and emotions.

Next, there is a presentation of categories that point out the care and coping strategies adopted by sex workers, organized in a synthetic box (Chart 2) to facilitate viewing, which denote that they are just subterfuges in an attempt to overcome stressors (negative feelings and emotions and mental suffering). Therefore, five thematic categories emerged.

The excerpts from the narratives that made up the categories indicate that the coping strategies used by sex workers are configured in attempts to face and survive the pandemic, from focusing on problems and creating ways to follow the guidelines to overcome this moment: resignify and regulate emotions and feelings, as a way of not aggravating subjective symptoms and negative emotions. In addition, the search for spirituality and religiosity become a way of coping, as they seek strength in the divine to go through the pandemic and create positive emotions. The support network formed by family members and the social support offered by social movements have helped to overcome the consequences imposed by the pandemic. Finally, the use of psychoactive substances and controlled medications has been shown to be common in everyday life, in order to avoid psycho-emotional disorders.

**Discussion**

The profile of sex workers, which corresponds to the characterization of those studied here, is in line with previous studies. In research developed with sex workers, both in Belo Horizonte (Brazil) and in a city in Southeast Asia, it was evidenced that they were at the base of the social pyramid and had little time of schooling. Some other previous research confirms the results presented here, because although historically these women have composed groups of people in situations of vulnerability to STI/HIV, effectiveness in health education strategies for health promotion and STI prevention was noticed, allowing the adherence to condom and hormonal contraceptive use.

The negative emotions and feelings present in the narratives are just a reflection of the conditions of invisibility and marginality experienced by sex workers, with aggravation of stressors arising from the consequences imposed by the pandemic and the continuous absence of State support. Such women were forced to follow restrictive measures, such as social distancing and confinement, while there was an abrupt reduction in the number of clients and income.
Chart 1. Organization of thematic categories that refer to the stressors of the system and the respective excerpts from the narratives. Alto Sertão Produtivo Baiano, Brazil (n=30).

<table>
<thead>
<tr>
<th>Thematic categories</th>
<th>Excerpts from the narratives</th>
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<tbody>
<tr>
<td><strong>Intrapersonal stressors:</strong> Fear, anxiety and difficulties sleeping with the uncertainties of the future as a result of the pandemic.</td>
<td>“I’m afraid that I won’t be able to get more clients and money to meet the needs. Fear of dying and my children being helpless. This pandemic is killing my nights” (SW 01). “I’ve been anxious, frustrated, worried, because I don’t know if I’m going to get money or not to live. Look, it’s hard, friends and neighbors help with food, but not every day. They are afraid of not being able to pay the bills either” (SW 04). “I haven’t slept well, I’m anxious, there were days when I stayed up all night, wondering if I would have money” (SW 16).</td>
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<td><strong>Interpersonal stressors:</strong> Concern about personal and family support.</td>
<td>“I’m worried boy, I don’t know if I’ll have the life to keep my house, support my children. Now it’s starting to get better, but I’m still worried, with the little money I’m making” (SW 02). “Clients disappeared at the beginning of the pandemic, but now that the fair is back, I’m slowly raising money, which already helps to buy food and take it home” (SW 07). “I was often sleepless, sleepless nights, worried without money to eat, sad to see that my mother and son were having difficulties” (SW19).</td>
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<td><strong>Interpersonal Stressors:</strong> Irritability and conflicts with co-workers and family members during confinement at home.</td>
<td>“I’m very irritated, impatient with my children complaining about coming home without money, without food. Having to ask my mother and her throwing it in my face” (SW 06). “Now that the fair is back, I’m very irritated, every day I fight with a colleague, because there are still few customers and you know how it is, right?” (SW 22). “I’ve been fighting a lot with my father and mother, I came home and they didn’t want to, they’re ashamed of me and of what I chose to do to survive” (SW 25).</td>
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<tr>
<td><strong>Extrapersonal stressors:</strong> Anxieties and insecurities generated by working conditions enhanced by the pandemic.</td>
<td>“You know, we don’t have government support, most of us don’t get help. In fact, not only now in the pandemic, but we never had anyone’s support and we felt insecure” (SW 03). “Our profession has never been recognized, even politicians come to us, they want to pay anything and they don’t organize to have our rights. If we didn’t have it before, imagine now in the pandemic” (SW 10). “All we want is to have labor rights, to have the right to the emergency aid, not to suffer prejudice from the professionals who serve us. I almost never go to the health unit, a nurse there treated me very badly because she knew how I make my living” (SW 22). “My gosh, there’s no one for us, the government is non-existent, we don’t have support, we don’t have our profession regulated. I work in the women’s collective charging councilors, we made a list of requests to endure the pandemic and we were not heard” (SW 30).</td>
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Source: Authors.

These questions are relevant to Systems Theory, because subjective aspects of the human being make up a system interrelated with stressing mechanisms that unbalance the field of vital energy, which reflects in organic reactions with effects of different dimensions such as psychological, physiological and even sociocultural. Women in the exercise of sex work, have their feelings and emotions and, of course, mental health and quality of life, interfered by these stressors that can be of inter, intra or extrapersonal origin, as well as from synergistic interactions with the environment in which they are inserted17,18.

Studies carried out with sex workers in Europe and Africa have shown that many of them have anguish and fear in the face of the impossibility of not having enough money to survive, especially due to the lack of public policies focused on emergency income for this specific group, since the income from the sexual service was scarce in view of the social distancing guidelines imposed1,4,14,16,20,29.

Problems with sleep patterns, insomnia and difficulties in sleeping due to worry are part of the daily life of sex workers, because during the night they work and, during the day shift, they
**Chart 2.** Organization of thematic categories that refer to care and coping strategies in the face of stressors in the system and the respective excerpts from the narratives. Alto Sertão Produtivo Baiano, Brazil (n=30).

<table>
<thead>
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| Strategies focused on the problem (pandemic) and on the guidelines passed on by the authorities. | “I’ve been trying to respect the recommendations, trying to wash, trying to keep the distance, sending videos to clients, but it’s complicated, because two of them wanted to see it in person and it was without a mask” (SW 03).  
“I was closer to my children during the quarantine, it was good on the one hand, because they are everything to me and the fact that I want the best for them, I never lost hope that the pandemic would pass” (SW 19).  
“The quarantine was difficult, I found myself desperate, without income. Being with my children, feeling their love helped me to be patient and know that everything passes, we lived one day at a time following the mayor’s orders” (SW 26). |
| Strategies focused on reframing and regulating emotions and changing the meanings of the pandemic. | “Facing this pandemic situation is complicated; I try not to have negative feelings about the new coronavirus, to think positively that everything will pass, that the vaccine will arrive” (SW 02).  
“I try not to think about the fear that covid is causing, I try to think that in the near future there will be a vaccine. But it is so difficult to see my children in need, but when I see that there are some people helping, it gives me hope” (SW 11).  
“I never was of the type that does physical activity, but I started taking walks in the fields where I live, to distract my mind and not keep thinking nonsense and try to improve the preoccupation, the sadness and the fear” (SW 24). |
| Search for religious practices, religiosity and spirituality. | “My gosh, because of the pandemic I started to take more care of my inner side, think about God, think about good things and have faith that everything will pass. It is the best way to have mental health and not think nonsense” (SW 01).  
“We have to trust and believe, right? Have faith, we always pray here at home, I gather my children, we listen to the religious services on the cell phone and pray to God, he knows what is best and will get me out of this situation. It’s not because I’m a bitch that he’s going to abandon me, when I cry out he helps me and sends someone to help” (SW 08).  
“Well, I do some sympathies to attract some men from the neighborhood, that even helps. We can’t lose faith, I believe a lot in the forces of nature, I’m from Oxum, and she helps me a lot, she’s the one who keeps my mind thinking about good things and look, she hasn’t abandoned me at any time” (SW 17). |
| Support network and social support. | “My gosh, I always consult with the psychologist, now in the pandemic it’s online. I do a sexual program, but I don’t feel well, I live with my mother and my father lives in another city. The little money he sends I pay the psychologist” (SW 05).  
“Having my kids with me, thinking about them and their love is important because it keeps me hopeful even if things get tough. Their love makes me believe that everything will pass” (SW 18).  
“There are some churches that are delivering basic food parcel, mask, alcohol gel. Even though there are some people who know how we work, they still deliver these things to us. This is good because it gives hope and takes away some of the anguish” (SW 20).  
“Our women’s collective is so important. It’s for each other; we help each other, go after donations, masks, hygiene products. With the return of the fair, the presence of clients for better a little, but the women’s collective remains active” (SW 30). |
| Use of controlled substances and medications. | “I take a natural tranquilizer; I drink tea to stay calm. I also get sleeping pills. I don’t make appointments, but we always get these drugs with a black stripe” (SW 02).  
“I use controlled medication, it helps me a lot to sleep; even more now in the pandemic, I took even more, to get rid of anxiety for fear of the future. Imagine there, no customer and no money?” (SW 05).  
“I drink a lot to face life and clients, but during the quarantine, without a client I drank more, I stopped eating to drink. Also because I had little food and left it for my children” (SW 15).  
“My gosh, I’ve never drunk as much as I do now during this period, there are nights I drink and take the medication, but what am I going to do? I prefer sleeping at night than being anxious thinking bad things” (SW 28). |

Source: Authors.
get little rest, as they have to take care of other tasks. The damage to this basic human need worsened with the pandemic period, due to the difficulty in putting food at home, in addition to insomnia contributing to the emergence of psycho-emotional disorders.

The money obtained from sex work is essential for subsistence and suppression of needs, both for themselves and their families, in addition to helping to acquire means and actions to ensure a healthy life, take care of the physical, emotional and spiritual aspects to the fullest extent.

Problems of interpersonal relationships, whether with family members or co-workers, are part of everyday life and interfere with emotions, since before the emergence of the COVID-19 pandemic and, intensified in this critical period, with the confinement of these women with parents, children and companions during quarantine. Family members’ intolerance of sexual service has always been a reason for conflict, evidenced both in the border region of the Amazon region between Brazil, Peru and Colombia and in Ethiopia and Kenya during the pandemic.

In view of the aforementioned stressors, any aspects of emotions and the human psyche, when impaired, interfere with basic human needs and, therefore, demand reactions and coping strategies, which are unique and individual, to achieve direct benefits to mental health. The implementation of coping is necessary to break with stressors and create a protection system against organic reactions, such as psycho-emotional ones in sex workers.

When the ways in which they care for, protect and face the consequences arising from the pandemic are revealed, coping strategies aimed at the individualities of each one emerge, even though they reflect behavioral, emotional and attitudinal aspects consistent with the entire group. In addition to those mentioned in the theoretical framework focused on the problem and emotions, there are other coping supports, such as the use of religiosity and spirituality, the support network and social support and the use of substances that interfere with neuro-psychomotorial systems.

In the context of social distancing, isolation and mass confinement demanded by the WHO guidelines to contain the pandemic, the development of harmful effects on the mental health of the general population of Brazil, Spain and China, as well as in groups of sex workers in Africa have been noticed. And, to face the distance, there is the adoption of individual responses and the creation of subjective mechanisms to protect emotions, such as spirituality.

By revealing the belief in the divine (God) as a mechanism to achieve balance of mental health, well-being and quality of life, it is verified the importance of this subjective and positive aspect that most people give to religious practice and/or spiritual search. Women in the exercise of sex work, who daily experience marginality and vulnerabilities, resort to these subjective mechanisms of the psyche and human individuality as a form of protection and confrontation.

Perspectives of religiosity and spirituality, as well as religious practices, proved to be commonplace in the daily lives of sex workers who contributed to previous studies developed in Brazil and on the Amazon frontier, as mechanisms to face violence, exploitation, difficulty in accessing health services and poverty, in addition to the search for balance in mental health.

It should be added that many women included in the sexual service did not receive the funds from the financial emergency aid provided by the Federal Government (which would make it possible to develop coping in the face of some stressors) to keep the distance, among several factors, fear of having their profession discovered by close people or family members, by the institutional stigma perpetrated by government service professionals, by the recurrent failures of the system that manages the granting of this resource.

The guarantee of social security and other labor rights have been denied, before and during the pandemic, enhancing vulnerabilities and other stressors, making them more susceptible to mental/emotional problems, bringing them insecurity about their own future and that of their dependents.

Governments of Argentina and some European countries, such as England and Ireland, created specific benefits for sex workers to face the COVID-19 pandemic; however, many of them reported fear of having their profession discovered by family members and acquainances (with the disclosure of personal information by prejudiced professionals). This is due to the need to inform the profession at the time of registration to have the right to this resource granted by the State, causing many women to give up the aid or omit their real occupation.

The social support of the women’s movement and a support network has been shown to be effective for sex workers to face the consequences and support the emotional disorders that arise.
The absence of the State in the protection of vulnerable groups fosters the presence of a social vacuum, wide open during the pandemic, being occupied by support groups that help them to protect themselves from stressors, as is the case in India and Africa\textsuperscript{29,35}.

The use of psychoactive substances is also a constant in the lives of many people involved with sexual service and has been a subterfuge to overcome crises of anxiety, worries, insomnia and other negative feelings caused by the worsening of the pandemic. Studies before and after COVID-19 revealed the abusive use of alcohol and other drugs as a way to face daily difficulties and problems\textsuperscript{15,25,27,34,35}.

The holistic care provided by these professionals to sex workers is essential for the adoption and care of self-care practices, coping, protection from stressors with positive feelings, insofar as the guidelines passed on in a simple, clear and objective way are congruent with the reality and attentive to the promotion of mental health.

It is noticed that there is a relationship between the mental health of sex workers and their sexual and reproductive dimensions, since the lack of information, unqualified professional assistance and negligence of health professionals will lead to an imbalance of their emotions, insecurity about the future and fear of not being able to fully exercise their profession\textsuperscript{13-16}. Considering the fact that their body (work instrument) exposed to illness, favors work vulnerabilities, such as the lack of consented and paid sexual practice, reduced income and psycho-emotional repercussions\textsuperscript{10,12,13}.

The limitations of this study are anchored in the applicability of the research in a poor region of the Brazilian northeast and far from large centers, which restricts the advancement of results to other scenarios, both in the country and in the world. In addition, the restrictions of investigations intertwined with the pandemic period of the new coronavirus SARS-CoV-2 in several countries, impose limits to the discussion and reduce comparisons with other cultures, realities and contexts experienced by various sex workers. Finally, there is a theoretical gap about the object in question that addresses the theoretical framework (Systems and Coping) used in the present study.

**Conclusion**

It is concluded that the group of women in the exercise of sex work who contributed to the study had their personal needs and, therefore, their stressors potentiated both by the COVID-19 pandemic and by the consequences arising from the guidelines of international bodies, such as the WHO, and the Ministry of Health of Brazil for the mitigation of the chain of transmission: social isolation, mass confinement and social distancing.

Social distancing proved to be a dubious action: at the same time that it protected and prevented the population from infection by SARS-CoV-2, it allowed the development of various mental health problems due to the absence of strategies of the State that made it possible for these women to overcome this moment. The stressors indicated by the Systems Theory were: intrapersonal (negative feelings of fear, anxiety and difficulties in sleeping with uncertainties in the face of the pandemic), interpersonal (concern with the support of family members and irritability in the face of family and professional conflicts) and extra-personal (anguishes and insecurities with working conditions).

In turn, the coping strategies adopted by sex workers went beyond the focus on the problem and the regulation of emotions. They were also anchored in subjective aspects of faith, spirituality and religiosity, in support networks, social support and, finally, in the use of psychoactive substances and medications. Social support/protection proved to be minimal and limited, although it still contributed to these sexual service to adopt such strategies; while some of them (a minority) managed to obtain the financial emergency aid, most believed in the vaccine (offered by the Unified Health System) as a way to overcome the pandemic, they respected (as far as possible) the guidelines of the health prevention protocols, for the control of transmission and for illness by SARS-CoV-2, they received donations and hygiene materials from the women’s collective and from local political and religious institutions.
Collaborations

PLS Couto, C Porcino and SSC Pereira made substantial contributions to the research conception and design, data collection, data analysis and interpretation, writing of the manuscript or critical review, approved the final version to be published. AMT Gomes, LCM França and ABA Vilela participated in the data analysis and interpretation, writing of the manuscript, manuscript or critical review, approved the final version to be published.
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