

ORIGINAL

## Anxiety, depression and coping strategies in convalescent Covid-19 patients

### Ansiedad, depresión y estrategias de afrontamiento en pacientes convalecientes de Covid-19

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#### ABSTRACT

As an effect of the Covid-19 pandemic, it is expected that there will be a worsening of psychological health in the general population. An increase in the levels of anxiety and depression may be observed, depending on the coping resources that each person has or the lack of them. A study was carried out with convalescent patients of Covid-19 in the municipality of Viñales with the objective of determining the levels of anxiety, depression, and the coping strategies used. The study had a non-experimental, cross-sectional design with exploratory-descriptive scope. The sample selection was non-probabilistic and consisted of 77 patients. The interview, the IDARE, the IDERE, and the Lazarus and Folkman's Coping Modes Scale were used as techniques. As results, a predominance of the male sex was identified, the most affected age group with 76 % is 25 to 55 years of age and the most affected popular council is Viñales. There was evidence of medium anxiety levels as a state and high as a trait in 75 % of the sample, 86 % presented medium levels of depression as a state and high as a trait. The coping strategies used were focused on the problem, which was representative of 90 % of those studied.

**Keywords:** Covid-19 Convalecientes; Anxiety; Depression; Coping Strategies.

#### RESUMEN

Como efecto de la Pandemia de la Covid-19, es previsible que exista un agravamiento de la salud psicológica en la población general. Puede observarse aumento en los niveles de ansiedad y de depresión, dependiendo de los recursos de afrontamiento con que cada persona cuente o de la carencia de ellos. Se realizó un estudio con pacientes convalecientes de Covid-19 en el municipio de Viñales con el objetivo de determinar los niveles de ansiedad, de depresión, y las estrategias de afrontamiento utilizadas. El estudio tuvo un diseño no experimental, transversal con alcance exploratorio-descriptivo. La selección de la muestra fue no probabilística y quedó conformada por 77 pacientes. Se emplearon como técnicas la entrevista, el IDARE, el IDERE, y la Escala de Modos de Afrontamiento de Lazarus y Folkman. Como resultados se identificó un predominio del sexo masculino, el grupo de edades más afectado con 76 % es de 25 a 55 años de edad y el consejo popular más afectado es Viñales. Se evidenciaron niveles de ansiedad media como estado y alta como rasgo en el 75 % de la muestra, el 86 % presenta niveles de depresión media como estado y alta como rasgo. Las estrategias de afrontamiento utilizadas fueron centradas en el problema lo cual fue representativo del 90 % de los estudiados.

**Palabras claves:** Convalecientes de Covid-19; Ansiedad; Depresión; Estrategias de Afrontamiento.

## INTRODUCTION

COVID-19 is officially a pandemic. An emerging infectious disease capable of inducing severe clinical symptoms, including fatalities, has been reported across 189 countries. The SARS-CoV-2 virus caused the outbreak, which originated in Wuhan, China in December, 2019. The global spread of this novel coronavirus occurred rapidly, particularly in Latin America. The psychological impacts of the pandemic affect the entire population but are more noticeable in individuals who have contracted the disease. Psychological care for COVID-19 convalescent patients is essential because of the different circumstances they face, including isolation, quarantine, medical treatment, and follow-up for potential disease-related consequences. These experiences can result in symptoms like anxiety, depression, and unhealthy coping mechanisms, which can adversely impact their mental health.<sup>(1)</sup>

In a virtual press conference hosted by the pharmaceutical company Lundbeck, Dr. Aldo Suárez, a psychiatry specialist and former president of the Mexican Psychiatric Association, discussed how the COVID-19 pandemic has given rise to an environment marked by disease and death. This, combined with substantial personal and national economic losses, has elevated the psychosocial risk in response to the threat of a traumatic event. "In this situation, the risk of developing mood disorders extends beyond infected patients to include families of those who have lost loved ones to COVID-19, healthcare professionals caring for the sick, and the general population. Many individuals may face serious challenges, such as job loss, resulting in distress and uncertainty about the future", as the specialist stated.<sup>(2)</sup>

The most prevalent immediate psychological disorders experienced by survivors are depressive episodes and transient acute stress reactions. Pathological grief, depression, adjustment disorders, post-traumatic stress symptoms, substance abuse, and psychosomatic disorders have been reported as potential delayed effects.<sup>(1)</sup>

The psychiatrist stressed that "prolonged patterns of distress may present as constant sadness, generalized fear, and physically manifested anxiety. These symptoms often escalate to a severe level and persist over an extended period." A notable finding from this analysis is that a mere 2 % of the studies examining the psychological impact of COVID-19 have specifically targeted individuals who are sick. As Dr. José A. Muñoz-Moreno, the researcher responsible for coordinating this review at the Fundación Lucha contra el Sida y las Enfermedades Infecciosas, noted: "This situation may be related to the fact that physicians have primarily focused on addressing patients' immediate life-threatening physical effects, with corresponding psychological consequences receiving less attention." "Healthcare systems worldwide can now shift their focus to the psychological aspects of the disease, impacting us in the long term." he expressed.<sup>(1)</sup>

Depression associated with the coronavirus presents with symptoms of distress, anxiety, and irritability. In this context, individuals experience COVID-19 distress in four distinct phases: fear, isolation, uncertainty, and future.

The initial distress is the fear of falling ill and the possibility of dying in isolation at a medical facility. It's not merely the chance of contracting the virus, but also the elevated likelihood of being unable to say goodbye to the loved ones. Additionally, the second phase of COVID-19-related distress entails isolation resulting from the seemingly never-ending lockdowns. This, in turn, leads to the third form of distress, which is uncertainty, mainly regarding the economy. Many people have lost their jobs, while multiple companies have elected to reduce expenses, creating uncertainty about when any individual might be impacted.<sup>(3,4)</sup>

### *Coping strategies*

Coping strategies involve efforts made through manifest or internal behaviors to address internal and environmental demands and conflicts that exceed an individual's resources. These processes are at work whenever there is an imbalance in the individual-environment interaction. It is a common term within the field of psychology that is frequently linked to the experience of stress.

### *Types*

There are two types of coping strategies:

Problem-focused coping strategies entail the individual focusing on resolving the situation by searching for solutions to the issue that has resulted in cognitive dissonance. There is a deliberate search to find a solution and restore equilibrium disrupted by the presence of a stressful situation. Examples of these strategies include confrontation, seeking social support, and problem-solving.

Emotion-focused coping strategies entail regulating the emotional consequences that arise due to encountering a stressful situation. If these strategies prove ineffective or insufficient, the goal will shift to limiting the individual's impact. These coping mechanisms consist of self-control, distancing, positive reappraisal, self-blame, and escape/avoidance.<sup>(5)</sup>

A systematic review of 58 scientific papers on the psychosocial impact of COVID-19 reveals prevalent disturbances in the general population, including depression (found in 46 % of the reviewed studies), anxiety (60 %), stress symptoms (17 %), insomnia (17 %), feelings of isolation (3 %), and post-traumatic stress disorder (3 %).<sup>(3)</sup>

The study, presented at the inaugural virtual COVID-19 conference, has revealed that women, young adults, and healthcare workers or caregivers for the sick are the groups most susceptible to psychological impacts of COVID-19. <sup>(4)</sup>

Due to these considerations, the research was undertaken with the goal of assessing anxiety and depression levels while describing the coping strategies employed by COVID-19 convalescent patients in the Municipality of Viñales. This study carries considerable significance for the healthcare field and for the community of clinical psychologists, as it investigates anxiety and depression as emotional states, as well as the coping methods used by convalescent COVID-19 patients in Viñales. The primary novelty is that this study examines a population with limited prior research, and the results will be relevant for the comprehensive approach to individuals whose conditions have biopsychosocial implications.

## METHODS

A cross-sectional, exploratory-descriptive study was conducted. The selection method of the sample was subjective, non-probabilistic. The analysis focused on COVID-19 patients who had recovered and were from the local area.

The study's inclusion criteria were limited to individuals who were between the ages of 19 and 60, had recovered from the disease, and were both physically and mentally capable of responding to research techniques and instruments, and willing to participate. The exclusion criteria included the lack of informed consent.

According to the registry of convalescent patients with COVID-19 maintained by the Municipal Public Health Department of Viñales between March 2020 and June 2021, 98 individuals have been reported as having recovered from the disease. The definitive sample consisted of 77 patients from the Municipality of Viñales. The assessments were conducted during patients' visits to the interdisciplinary clinic in the area. The process began with an interview, followed by the administration of the anxiety and depression inventory, which are detailed below.

*Instruments used:* a semi-structured individual interview was used to investigate sociodemographic variables in the recovering patients (Appendix). Furthermore, this facilitated the establishment of informed consent as the main ethical aspect of the research.

*State-Trait Anxiety Inventory (STAI):* the scale was used to measure levels of both state and trait anxiety within the sample population. The participants completed a survey consisting of 40 statements to describe themselves. Twenty questions were administered to evaluate current state anxiety ("How do you currently feel?"), and an additional twenty questions measured trait anxiety ("How do you typically feel?"). Participants rated the intensity of their experience on a four-point scale for each item. To participate in the survey, participants were required to associate the corresponding number to the right of each expression on the protocol.

*State-Trait Depression Inventory (STDI):* it was used to evaluate the levels of both state and trait depression among the study subjects. The test involved administering 42 prompts to participants, which they used to describe themselves. Twenty questions were administered to evaluate current state depression ("How do you currently feel?"), and an additional twenty two questions measured trait depression ("How do you typically feel?"). Participants rated the intensity of their experience on a four-point scale for each item.

*Lazarus and Folkman's Ways of Coping Scale:* the instrument consists of 67 items, with each item evaluated according to the subject's level of compliance with the corresponding description. Criteria include the degree to which the subject responded or acted in alignment with the item description.

*Analysis and discussion of the results:* responding to the study's objectives, we analyzed the data and obtained the following results.

*Description of sociodemographic variables:* the study's main findings demonstrate a male predominance (61 cases) over female (16 cases) in positive Covid-19 cases within the Municipality's sampled population (77), representing 79 %. In terms of age, the group between 25 and 55 years old was the most representative, comprising a total of 76 %. There were 5 patients aged 18 to 24 years old (3 male and 2 female). Additionally, there were 58 patients aged 25 to 55 years old (46 male and 12 female). Lastly, 14 patients aged 56 to 60 years old were recorded (12 male and 2 female). Among the local councils, Viñales has the highest incidence with a total of 59 cases, representing 76 % of the total positive cases. The República de Chile Council follows with a total of 12 cases.

Based on the interview results, patients were hospitalized for an average of 5 to 10 days and were primarily treated with interferon, administered in 4 doses. They reported that the medical staff provided satisfactory care during the patients' stay at the healthcare facility. However, they experienced tension due to their illness symptoms and anxiety while waiting for the CRP results following treatment. This is in line with a study conducted by Dr. José A. Muñoz-Moreno, which found that positive patients exhibited signs of depression and sadness during hospitalization.

## RESULTS

### Results related to emotional states

Regarding the findings obtained from assessing the emotional states of these patients, the initial administration involved the use of STAI. In this aspect, the study reveals that 75 % of the sample population experienced moderate levels of state anxiety and high levels of trait anxiety. This demonstrates that COVID-19 patients are subjected to conflictive or stressful situations, although this does not necessarily indicate anxiety as a psychiatric disorder. They feel tense, worried, agitated, and even guilty in some cases for having become infected. These findings align with the study entitled *Mental Health during the COVID-19 Pandemic*, which reports that the most common causes of anxiety following infection are fear of death, social exclusion, quarantine, helplessness in protecting oneself and loved ones, fear of separation from loved ones, reluctance to care for vulnerable individuals due to fear of contagion, and feelings of impotence.<sup>(1)</sup> These data can be observed in figure 1.

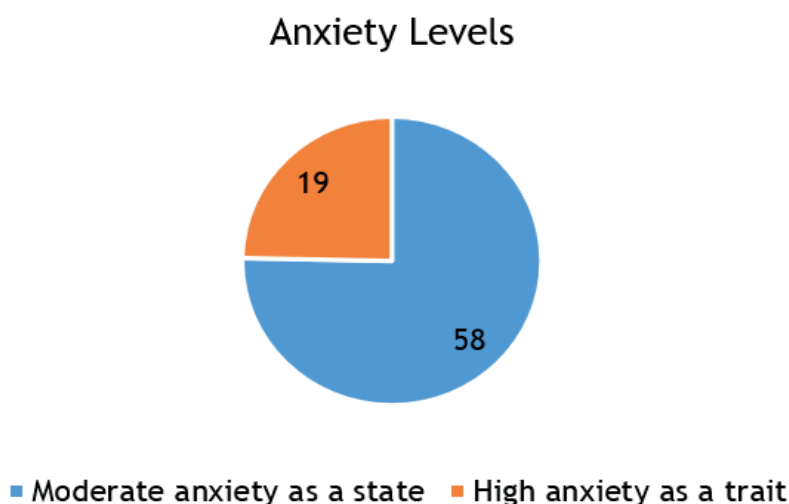


Figure 1. Anxiety levels.

Furthermore, the STDI was administered to measure depression levels of COVID-19 positive patients after they have been confirmed negative.

These are the revised results: Out of the 77 patients studied, 66 exhibited moderate levels of depression as a state, which accounts for 86 % of the total sample. Only 11 of them displayed high levels of depression as a trait, which is 14 % of the studied sample. This suggests the presence of depressive symptoms in COVID-positive patients, with primary indicators including insomnia, sleeping difficulties, and occasional feelings of sadness. This is supported by a study that found that many individuals "experience overwhelming fear of developing a severe illness," while others understandably have concerns about their well-being. Additionally, early research suggests that as many as one-third of recovering patients may endure persistent mood alterations and experience depression. These data can be observed in figure 2.

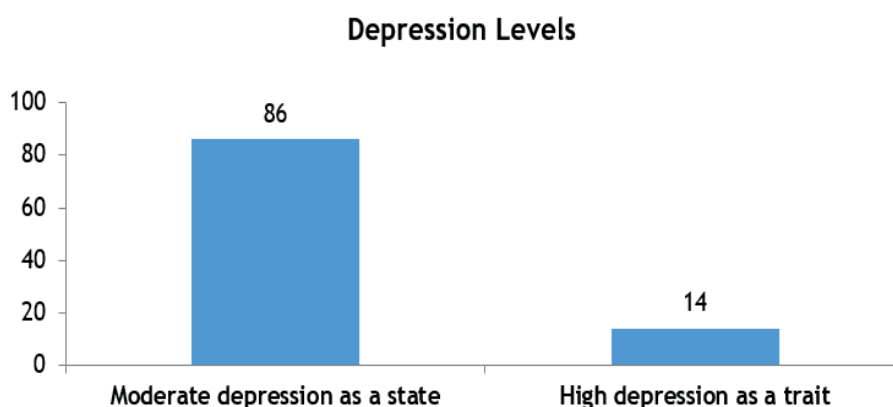


Figure 2. Depression levels.

Results obtained from the coping strategies employed by COVID-19 convalescent patients in the Municipality.

Out of the 77 patients examined, 79 % (61 patients) employed problem-focused coping strategies. Key items within this category, such as self-control (13), positive reappraisal (12), acceptance of responsibility (9), seeking social support (6), and confrontation, received higher scores. These findings highlight the important mediating role of coping in response to the stressful experience's individuals go through. COVID-recovering patients in our Municipality have shown a strong commitment to facing the illness responsibly by following all medical guidelines and actively seeking effective solutions to the issue.

There is a deliberate search to find a solution and restore equilibrium disrupted by the presence of a stressful situation. Although there is limited research on coping styles in COVID-19 convalescent patients, the literature searches we conducted are in line with the results of our study. Among COVID-19 survivors, the prevalent coping styles are those aimed at addressing the challenging situation.

In other investigations related to coping with various illnesses or conditions, results similar to those in our research have emerged. Patients tend to move towards problem-focused coping styles, including self-control (11), positive reappraisal (15), and acceptance of responsibility (10).

## CONCLUSIONS

In the research conducted on anxiety, depression, and coping strategies among COVID-19 convalescent patients in the Municipality of Viñales, a significant prevalence of emotional states, specifically anxiety and depression, was found. These high levels of emotional distress can be attributed to the stressful circumstances associated with dealing with COVID-19 during the current challenging period we are facing. Patients have displayed feelings of tension, worry, sleep troubles, and have encountered difficulties in returning to their regular routines after a prolonged period of isolation. On the other hand, problem-focused coping styles were observed, leading individuals to confront the situation and seek solutions to the problem that has caused cognitive dissonance. This brings us to the conclusion that COVID-19 convalescent patients have experienced feelings of sadness due to the stressful circumstances, accompanied by symptoms of anxiety and depression, but without pathological alterations. Their coping styles have been centered on addressing the situation caused by the illness.

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## CONFLICT OF INTEREST

There was no conflict of interest.

## FINANCING

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## AUTHORSHIP CONTRIBUTION

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