Emotional responses, caring, self-care, and SARS-CoV-2 (COVID-19)

SUMMARY

Currently, the pandemic caused by COVID-19 and the various measures to stop the contagion has developed multiple crises in society. The work environment has been transformed, occupational diseases have increased, therefore, it was decided to analyze the information published on the current problem and it was found that according to statistics, depressive, panic, and stress disorders have increased, due to social isolation, the change in routine and new ways of exercising job responsibilities, leading to a decrease in people's psychological well-being. By way of conclusion, it can be said that it is important and necessary for people to develop both individual and collective resources that allow them to properly manage emotions and that integral health can be established and guaranteed.

Keywords: Emotions, care, self-care, COVID-19.
INTRODUCTION

The current article refers to occupational diseases and COVID-19 from the perspective of the work environment, this being relevant to the health of workers and their working conditions for the organization, which is why it is important to know about it. Thematic involves individuals and that can develop at a physical, mental, and social level, thus achieving that organizations comprehensively develop adequate measures for the functioning of workers, prioritizing well-being within safe and suitable work environments for the person.

Occupational disease in Colombia can be defined in article 4 of Law 1562 of 2012 (1) as the product of exposure to risk events inherent in the work exercise or the environment in which it is working, those diseases that are within of the table of occupational diseases and its cause is indicated with the occupational risk factors, it will be classified as an occupational disease, complying with the provisions of current regulations. In Colombia Gómez-Ceballos (2015) (2) in his study called “Work accidents and occupational diseases in workers compensation systems”, found that work accidents and occupational diseases affect public health. The productive sectors with the greatest affectations are manufacturing and construction due to injuries and musculoskeletal disorders that generally lead to compensation, however, it is difficult to define the severity of the injuries and the types of compensation granted. The study concludes with the characteristics of occupational contingencies and their importance in guiding prevention strategies in industries and working populations.

Regarding the health area, authors such as Vinueza-Veloz et al. (2020) (3) sought to determine the occurrence and intensity of Burnout Syndrome (BS) in Ecuadorian doctors and nurses during the COVID-19 pandemic and found that more than 90 % of the medical and nursing staff presented symptoms of moderate-severe burnout, finding a relationship with other variables such as age and gender. By way of conclusion, the authors affirm that more than 90 % of the workers in the studied sector have presented occupational diseases during the COVID-19 pandemic.

On the other hand, it was found that in the table of occupational diseases from decree 676 of 2020 (4), COVID-19 was included as a direct occupational disease for health workers, because they are workers who are at increased risk of exposure to contracting the virus. According to Fuentes et al. (2020) (5), the organizational responses to the pandemic have implied the restructuring in the distribution of human resources and infrastructure, especially in the 26 hospitals of the Madrid service for the provision of emergencies to adults participating in the research carried out. The authors highlighted the importance of recognizing the impact on health personnel immersed in these processes. Along the same line of study, authors such as Cuba-Ribot, Chang, and González (2020) (6) analyzed the effects of COVID-19 on the mental health of the population and concluded that health, prevention, and control measures require strategies to promote their internalization, but in consideration of the working population, the effects of the psychosocial pandemic are greater in vulnerable groups. Therefore, in the face of this health emergency, organizations must adopt the necessary measures, following the appropriate routes to avoid an increase in this social reality that affects workers by changing attitudes, behaviors, well-being, among others, thus transforming working life and workers’ staff.

From all this, the importance of making known that occupational diseases and COVID-19 contribute to the beginning of developing new changes within the field of organizational psychology that respond to the needs of the organization. Thus, new actions are being developed in favor of the well-being and health of workers, implementing new forms of work, allowing organizations to adjust and adapt in the presence of this virus. Due to the above, the objective of this narrative review is to analyze the emotional responses, care, and self-care of workers in relation to SARS-CoV-2 (COVID-19) from the different perspectives presented in the different published studies.

Behavior of COVID-19

The International Labor Organization (ILO) (7) states that 6 500 people die every day due to accidents or occupational diseases,
which means that more than 2.78 million deaths per year, likewise, 374 million occur per year, injuries with respect to non-fatal jobs. On the other hand, the Ministry of Health and Social Protection (2017) (8) states that, since 2013, there has been an increase in cases of anxiety and depression, taking third place among the most reported occupational diseases, after the affectations auditory.

On the other hand, at the end of 2019, a new disease originating in Wuhan, Hubei province of the People’s Republic of China was confirmed (9); And for the first quarter of 2020, COVID-19 was defined as a pandemic, due to its rapid spread in different countries, generating uncertainty at the health, social and labor levels as well. In this way, this Public Health disease became a focus of international interest, and a new type of coronavirus was defined, forming part of a large family of viruses that can cause different diseases, ranging from a common cold to a disease. severe (10). COVID-19 has been characterized as a disease that has affected a large number of individuals in various places, in cases of morbidity and mortality, figures that have been increasing day by day.

The disease manifests itself if it complies with those symptoms such as fever, dry cough, and fatigue; Other manifestations include affectations in different areas of the body, face, and head, pain, conjunctivitis, skin eruptions, especially the hands and feet in extremities that in some cases show color changes in the fingers, general discomfort can be mild and gradually increase (eleven).

The WHO COVID-19 outbreak (2020) (11) has reported a relative increase of 1.2 % in confirmed cases and 0.59 % in death cases; Due to this, the number of cases in the world is increasing, which represents for society to carry out a proper application of measures to prevent the spread of the virus since society has expressed a series of negative emotions and thoughts that threatens the mental health of individuals (9). For this reason, the presence of this disease has caused unrewarding experiences in the health sector, both in patients and in medical personnel, generating fears or feelings of fear of death, the appearance of emotions of loneliness, depression, and sadness. profound irritability, as well as other criteria (12).

As has been shown, it is of great importance that, given the current situation, organizations regardless of the financial situation in which they find themselves due to this pandemic, it is an obligation not only at a legal level but also at an ethical, moral and social level to review all the necessary measures, for its workers, adopting strategies aimed at identifying, quantifying, and monitoring risk factors, to implement safe preventive measures protecting the mental and physical well-being of workers (13).

METHODS

The present research was developed through a bibliographic design of a documentary type, where texts were analyzed that allowed the interpretation and analysis of the research phenomenon. To search for information, search criteria were established, these criteria were determined from keywords and/or phrases: COVID-19, coronavirus, mental health, pandemic, emotional responses, self-care and/or care, occupational diseases, organizations, coping, life habits, beliefs, the above, bearing in mind that keywords and/or phrases were combined to obtain information in the various scientific databases.

Likewise, the sample obtained in the research was of a theoretical or conceptual type, once the documents had been reviewed, their content and relationship with emotional responses, self-care, and COVID-19 had been reviewed, it was determined that a sample was made up of 40 scientific and informative documents such as the source of information ranging from 2012 to 2020, it is pertinent to mention that the documents taken as a sample are divided into articles, regulations, protocols, and recommendations of various organizations.

For their part, the documents were obtained through various databases of scientific information within which are: Dialnet, Lantindex, ProQuest, Redalyc, Scielo, Science Direct, and Scopus, in addition to pages of organizations and/or institutions and the Ministry of Health and Labor of Colombia.
On the other hand, the process to obtain the results was as follows: first, the search for information was carried out in the various sources, then the content of the documents and the relationship with the investigation were analyzed, then all the documents were systematized among themselves and finally, were processed to obtain the results of the investigation.

Inclusion criteria

The documents included in the research had to meet the search criteria, likewise, they had to be published between the years 2012 and 2020.

Exclusion criteria

All documents that were not related to the search criteria and the year of publication were outside the established range were excluded.

RESULTS

Working conditions, economy, and mental health

It was found that the mental health of workers after this crisis has led to a greater workload since the entire general health system is exposed to contracting this disease; These workers who have increased contact with COVID-19 patients can develop symptoms of anxiety and stress. Likewise, in Wuhan, due to this disease, workers developed psychological symptoms such as depression, stress, difficulty sleeping, feelings of anger, and fear, thus affecting decision-making at the personal and work level (14-16).

Due to this, COVID-19 has brought several transformations at the social and labor level, thus increasing the numbers of mental illnesses in workers in the health system, factors that are involved such as inadequate worker conditions, workload (17), decrease in salaries, limited personal protective equipment, feelings of anguish, little preparation in the measures to act in the face of the pandemic, among others; In the same way, it is considered that in the face of this crisis, work performance has negatively impacted, since satisfaction and productivity in workers are low, hence the importance of meeting this need related to the mental health of workers with respect to COVID-19 to prevent occupational stressors that lead to some emotional or physical imbalance (18-20).

Meanwhile, statistics have shown that in several countries such as Singapore, 27% of health professionals have reported psychological and psychiatric symptoms due to this pandemic, likewise, it was found that 20% of doctors and nurses presented post-traumatic stress disorder; on the other hand, in Hong Kong almost 89% of workers have shown high-risk psychological symptoms, finding figures for depressive disorders (44%), panic disorder (13.3%), agoraphobia (6.6%) and social phobia (1.1%) [twenty-one]. It is worth mentioning that in the face of the outbreak of this disease, the health system has affected the health system at the workplace where symptoms of stress have risen in workers, it is for this reason that entities require human resources to permanently monitor these factors and, in this way, prevent difficulties that affect the mental health of individuals (22).

Social isolation and confinement produce negative effects since routine changes, given the interruption of the schedules of activities outside the home such as work and school, inversely for those who must work or study from the beginning, home, they will also experience disruptions in routines properly intended for the home (23).

Table 1

| Databases             | Number of documents |
|-----------------------|---------------------|
| Dialnet               | 9                   |
| Lantindex             | 3                   |
| International organizations | 3                |
| Ministry of Health and/or Labor | 2          |
| ProQuest              | 4                   |
| Redalyc               | 6                   |
| Scielo                | 9                   |
| Science direct        | 2                   |
| Scopus                | 2                   |
| TOTAL                 | 40                  |

Source: self-made.
Although such activities can be continued, they are far from optimal performance, with productivity and efficiency adversely affected by the increased interaction between work and study with home life (24). These adjustments can affect the number of hours spent sleeping, spending time in bed, and detract from the positive associations between home, relaxation, leisure, and rest, leading to higher levels of stress (25).

Even when work represents a health risk, currently there are psychosocial factors that affect the health of the worker, since when negative work situations that are generated within organizations cause occupational diseases, they diminish the well-being of the person and therefore directly affect your health. On the other hand, work-related illnesses are derived from the relationship between individual predisposing factors and from a professional factor that displays a favorable influence in relation to work conditions (26) (Figure 1).

Among the effects caused by psychosocial factors are alterations in mental health; Furthermore, employees are affected by the organizational climate due to the disposition of work teams, which results in a decrease in quality of life, which many have associated with Burnout syndrome and stress (27). Likewise, exposure to psychosocial risks at work can contribute to the worker developing a mental disorder, being vulnerable, and having a high psychosocial risk at work that can intervene as a triggering or aggravating factor (26).

Work stress becomes a health problem when the person fails to level the organization’s conditions against the form of response, that is, a maladaptive response of the body is generated (28) and turns it into chronic work stress, generating negative responses in the person that lead to diseases that are even more harmful to the individual, including cardiovascular diseases, metabolic diseases, high professional burnout or burnout syndrome (Figure 2) (26).

**Post-traumatic stress disorder (PTSD) (29).**

In perspective, from the emotional reactions review post-traumatic stress, mental health, and occupational stress of health workers in health professionals due to the high mental load and risk of exposure to contracting the disease. And especially in the face of SARS-CoV-2 outbreaks among the same members of the work team. Considering urgent care actions for this group of workers and the productive sector.

**Depression and anxiety (30).**

The extreme response of emotional reactions to COVID-19 preventive measures known as quarantine, isolation, and distancing, is related to sleep disturbances, exposure to stressful situations and a feeling of uncertainty (31) represented in the limitations of freedoms and the high possibility that plans will be dramatically changed and the abrupt separation from the patient’s social or
family context are frequent catalysts of depression and anxiety, which in circumstances of social isolation can present as part of a disorder adaptive or an adjustment reaction that, in many cases, does not warrant drug treatment (32,33).

**Anxiety**

The pandemic has been gaining strength in the thinking of every human being, sometimes in a negative way, affecting the emotional balance of the population. The distorted thoughts in the pandemic, related to the symptoms of generalized anxiety, focus on the interpretation of the situation as dangerous, associated with loss, damage, illness or death, insufficient internal and external control of the circumstances distributed in the fear of physical and mental damage, frustration, inability to cope with difficulties, and excessive worry about everything (34). A cognitive study of anxiety, proposed by Dugas in 1995, reveals four cognitive processes in the maintenance of anxiety: 1) Intolerance to uncertainty 2) The tendency to overestimate the usefulness of worry 3) Ineffective orientation towards problems and 4) cognitive avoidance; therefore, the COVID-19 pandemic, by appearing suddenly and knowing the control time of the pandemic, predicts a negative future, anxiety (35). Likewise, the relationship between uncertainty and the ability to solve problems triggers extreme concern that is included in the discomfort of social isolation; Before which, the negative vision of the future is intensified and therefore the presence of distorted thoughts (18).

This equation proposed by Ruiz, Arcaño and Pérez (2020) (12) can be symbolically and schematically subdivided into 5 elements (Figure 3).

1. The events: Each of them has its particularities in moments of normal life, and of course, they change during and after critical situations,
as is happening today with the COVID-19 pandemic.

2. People: They will think, act and reflect generally (to a greater or lesser extent), in one way or another in everyday life and crises, conditioning themselves directly and indirectly, according to their individualities.

3. The environment: As a biopsychosocial, each person is the product of various factors and aspects that are directly and indirectly interrelated.

4. Possible answers: They are constituted as patterns by their regularities in each of the stages of the life cycle and the complex process of personality formation.

5. The Programs / Protocols: If we stay in this analysis until the previous elements, in human behavior, before each new crisis.

Multiple investigations (9,36-38) agree that the pandemic caused by COVID-19 is perceived by individuals and communities as a stressful and threatening situation. Therefore, the World Health Organization (WHO) (11) refers that isolation is causing a great consequence at the psychological level, because physical distancing leads to feeling anxiety, stress, fear, among other emotions.

Figure 3. Model Equation of Psychism with emphasis on Care / Self-Care (12).
DISCUSSION AND CONCLUSION

We are increasingly experiencing the adaptive measures of organizations in the face of the preventive directives for the contagion of SARS-CoV-2 (COVID-19), however, the emotional responses of workers from different work settings and productive sectors are not always considered. Therefore, the relationship between occupational health, physical and mental health, and the repercussions of the current moment in each of the collaborators is emphasized. Co-responsibility for occupational health and the establishment of new habits, rituals, and habits in favor of psychological well-being and productivity (26,38).

Care and self-care in these times of pandemic are on the way to strengthening the individual and collective coping and adaptation capacity, based on a set of strategies for optimal dissemination and clarity of information for implementation in work teams of different production sectors taking into account the particularities of physical and mental loads (38).

The strategies for recognition and emotional management should, as far as possible, impact the families of the collaborators considering the current measure of teleworking, hence the models of life skills, stress elocution, and psychological well-being to increase resources and risk support networks latent manifestations of anxiety, depression, tension due to uncertainty and high tension due to risk of exposure to the disease, both in employees, their minor children, adolescents, and elderly dependents, considering that a large proportion of adults in a working condition comply with roles of caregivers, parents and those directly responsible for other family members (39,40).

REFERENCES

1. Ministerio de Salud. Ley 1562. Sistema de Riesgos Laborales y se dictan otras disposiciones en materia de Salud Ocupacional, Bogotá, Colombia, 11 de julio de 2012, 2012.
2. Gómez-Ceballos D. Accidentes de trabajo y enfermedades laborales en los sistemas de compensación laboral. Rev Brasil Med Trabalho. 2015;14(2):1153-161.
3. Vinueza-Veloz A, Aldaz-Pachacama N, Mera-Segovia C, Pino-Vaca D, Tapia-Veloz E, Vinueza-Veloz M. Síndrome de Burnout en médicos/as y enfermeros/as ecuatorianos durante la pandemia de COVID-19. 2020.
4. Ministerio de trabajo. Decreto 676 de 2020. Se incorpora una enfermedad directa a la tabla de enfermedades laborales y se dictan otras disposiciones. 2020.
5. B. Fuentes M, de Leciñana P, Calleja-Castaño J, Carneado-Ruiz J, Egido-Herrero A, Gil-Núñez, Á, et al. Impacto de la pandemia COVID-19 en la organización asistencial del ictus. Plan ictus Madrid. Neurología. 2020;35(06):363-371.
6. Ribot V, Chang N, González A. Efectos de la COVID-19 en la salud mental de la población. Rev Haban Cien Méd. 2020;19.
7. Organizacional Internacional del Trabajo. Seguridad y Salud en el Trabajo, 2019.
8. Ministerio de Salud y Protección Social. Salud mental, clave para el desarrollo de empresas y trabajadores. Boletín de Prensa 145, 2017.
9. Huarcaya-Victoria J. Revista Peruana de Medicina Experimental y Salud Pública. Consideraciones sobre la salud mental en la pandemia de COVID-19. 2020;37(2).
10. Bertoglia M. El hecho de que haya aparecido en más países, hace pensar que la transmisión entre personas es más factible de lo que se sospechaba. Universidad de Chile. Universidad de Chile. 2020.
11. Organización Mundial de la Salud. Enfermedad por el Coronavirus (COVID-19). 2020.
12. Ruiz AL, Arcaño KD, Pérez DZ. La psicología como ciencia y profesión en el afrontamiento del COVID-19. Rev Carib Psicol. 2020;153-165.
13. Ordoñez C. Sobre las enfermedades laborales. Rev Colomb Salud Ocupac. 2016;6(1):1-2.
14. Astrés M, de Alencar Ribeiro AA. Salud mental y estrés ocupacional en trabajadores de la salud a la primera línea de la pandemia de COVID-19. Rev Cuidarte. 2020;11(2).
15. Carrillo-Sierra SM, Rivera-Porras DR. Actualización en psicología oncológica. Arch Venez Farmacol Terap. 2019;38(5):573-578.
16. Acosta-Quiroz J, Iglesias-Osores S. Salud mental en trabajadores expuestos a COVID-19. Rev Neuro-Psiquiat. 2020;83(3).
17. Tapia FRO. Descifrando la patogenia de la COVID-19. Gac Méd Caracas. 2020;128(3):307-312.
18. Fernandes M, de Alencar A. Salud mental y estrés ocupacional en trabajadores de la salud a la primera línea de la pandemia de COVID-19. Rev Cuidarte.
19. Colmenares YV, Hernández KD, Piedrahita MA, Espinoza-Castro JF, Hernández-Lalinde J. Hábitos de alimentación saludable en estudiantes de secundaria. Arch Venez Farmacol Terap. 2020;39(1):70-79.

20. Cudris-Torres L, Barrios–Núñez ABonilla–Cruz N. Coronavirus: epidemia emocional y social. Arch Venezol Farmacol Terap. 2020;39(3):309-312.

21. Ramírez-Ortiz J, Castro-Quintero D, Lerma-Córdoba C, Yela-Ceballos F, Escobar-Córdoba F. Consecuencias De La Pandemia COVID 19 En La Salud Mental Asociadas Al Aislamiento Social, Bogotá, DC., Colombia, 2020.

22. de Figueiredo AM, Codina AD, de Figueiredo DCMM, Gil-García E, Kalache A. Letalidad del COVID-19: ausencia de patrón epidemiológico Gaceta Sanitaria, 2020.

23. Ramírez-Ortiz J, Fontecha-Hernández J, Escobar-Córdoba F. Efectos del aislamiento social en el sueño durante la pandemia covid-19, Scientific Electronic Library Online, 2020.

24. Quezada VE. Miedo y psicopatología la amenaza que oculta el COVID-19. Cuadernos de Neuropsicol. 2020;14(1):19-23.

25. Esparrza J. Breve historia de las pandemias de influenza, su impacto en Venezuela, y su relevancia para entender la presente pandemia del COVID-19. Gac Méd Cara. 2020;128(2):94-206.

26. Rivera-Porras D, Bonilla-Cruz NJ, Carrillo-Sierra SM, Forgiony-Santos J, Silva-Monsalve G. Educación para la salud laboral: Perspectivas teóricas desde la intervención. Arch Venez Farmacol Terap. 2019;38(5):540-546.

27. López-López L, López-Jaramillo P. Manejo de los pacientes con diabetes en la época de COVID-19: Recomendaciones prácticas. Gac Méd Cara. 2020;128(3):265-268.

28. González–Aristizabal D, Pumarejo-Sánchez J, Cudris–Torres L, Barrios–Núñez A, Olivella–López G, López–Castellar M, et al. Factores actitudinales sobre creencias del comportamiento suicida en estudiantes de psicología y medicina. Arch Venezol Farmacol Terapéu. 2020;39(3):274-278.

29. Astrés M, de Alencar Ribeiro AA. Salud mental y estrés ocupacional en trabajadores de la salud a la primera línea de la pandemia de COVID-19. Rev Cuidarte. 2020;11(2).

30. Lorenzo A, Díaz K, Zaldívar D. La psicología como ciencia en el afrontamiento a la COVID-19: apuntes generales. Anal Acad Cienc Cuba. 2020;10(2).

31. Johnson MC, Saletti-Cuesta L, Tumas N. Emociones, preocupaciones y reflexiones frente a la pandemia del COVID-19 en Argentina. Ciencia & Salud Colectiva 2020:25:2447-2456.

32. Muñoz SI, Molina D, Ochoa R, Sánchez O, Esquivel JA. E. Estrés, respuestas emocionales, factores de riesgo, psicopatología y manejo del personal de salud durante la pandemia por COVID-19. Acta Pediatr México. 2020;41(4S1):127-136.

33. Pimienta PXG. Cuidando mi Salud Mental durante el COVID-19. Asoc Mexic Psicol Hospital. 2020;1:24.

34. Moreno-Proaño G. Pensamientos distorsionados y ansiedad generalizada en COVID-19. Cienc América. 2020;9(2):251-255.

35. Santilan A, Palacios E. Actualización en el tratamiento de COVID-19. Arch Venez Farmacol Terap. 2020;39(2):191-194.

36. Lozano-Vargas A. Impacto de la epidemia del Coronavirus (COVID-19) en la salud mental del personal de salud y en la población general de China. Rev Neuro-Psiqu. 2020;83(1):51-56.

37. De La Serna J. Aspectos psicológicos del COVID-19. Cuad Neuropsic. 2020;14(1):10-18.

38. Briones-Jácome I. Psicología organizacional en tiempos de la pandemia COVID-19. Dominio de las Ciencias. 2020;6(3):26-34.

39. Carrillo-Sierra, SM, Rivera-Porras D, Forgiony-Santos J, Nuván-Hurtado IL, Bonilla-Cruz NJ, Arenas-Villamizar VV. Habilidades para la vida como elementos en la promoción y educación para la salud en los adolescentes y jóvenes. Archivos Venez Farmacol Terapéut. 2018;37(5):567-572.

40. Cáceres LC, Sierra SMC, Arias RMY, Peña KH. Primera infancia desde las neurociencias: una apuesta para la construcción de paz. Rev Virtual Univer Catól Norte. 2018;55:218-239.