

Mental health in health professionals facing the intervention in the pandemic generated by the SARS-COV-2 virus

Salud mental en profesionales de la salud frente a la intervención en la pandemia generada por el virus SARS-COV-2

Daisy Sánchez Santoyo ^a y Jose Angel Castillo Martinez ^b

Abstract

The objective of the article was to know the impact of the pandemic on the mental health of health personnel who work in the front line of COVID-19 care, given the adjustments they make in their daily professional and personal routine, carrying out a theoretical review of articles, manuals, and research generated in this regard, finding factors involved at the personal, occupational and social level that negatively favor mental health, and are mainly correlated with stress, the severity of the negative impact will depend on the self-care that the staff has health care and the care that its system provides, which both the World Health Organization and the Panamerican Health Organization have been proposing and each country adjusts it to its population. As a suggestion, it remains to verify the effectiveness of long-term self-care and care behaviors as well as the maintenance of results.

Keywords

Health professionals, mental health, SARS-CoV2, COVID-19, care, self-care

Resumen

El objetivo del artículo fue conocer el impacto de la pandemia en la salud mental del personal de salud que trabaja en primera línea de atención COVID-19, ante los ajustes que realizó en su rutina profesional y personal diaria, realizándose una revisión teórica, de artículos, manuales, e investigaciones generados al respecto, encontrando factores implicados a nivel, personal, laboral y social que favorecen de manera negativa en la salud mental, y están correlacionados con estrés principalmente, la gravedad del impacto negativo dependerá de los autocuidados que tenga el personal sanitario y los cuidados que su sistema le brinde, los cuales tanto la Organización Mundial de la Salud y la Organización Panamericana de Salud, han estado proponiendo y cada país, lo ajusta a su población. Como sugerencia queda verificar la efectividad que tienen las conductas de autocuidado y cuidado a largo plazo así como el mantenimiento de resultados.

Palabras clave

Profesionales de la salud, salud mental, SARS-CoV2, COVID-19, cuidado, autocuidado

INTRODUCTION

On December 8, 2019, an event generated by an unknown biological agent was presented in Hubei, Wuhan province, China, where a case of severe atypical pneumonia was reported caused by an unknown virus at that time, the cases began to increase, an element that they had in common, is a market for seafood and exotic food, according to what was investigated, it was found that the structure is a coronavirus, which we can usually find in bats (Díaz-Castrillón & Toro-Montoya, 2020; Escudero et ál., 2020; Maguiña et ál., 2020).

When investigating this new biological agent, on January 7, 2020, it was found that the structure was similar in correspondence to that of the SARS-COV virus, which in 2003

had already wreaked havoc in China; however, this was a new strain had mutated, generating an inflammatory process in the respiratory system, leading to multisystem failure, the World Health Organization (WHO) assigns it the name COVID-19 caused by the SARS-COV-2 virus, contagion is through respiratory secretions, having an incubation period of between 7 and 14 days, transmitting from human to human, through the respiratory tract, although it was found that mortality occurs in approximately 20% of the population from which it is infected, the remaining 80 % tend to present mild symptoms or be asymptomatic (Díaz-Castrillón & Toro-Montoya, 2020; Escudero et ál., 2020; Maguiña et ál., 2020).

At present, an element that has had an important presence to learn about the situation in which we live with respect to the

a Corresponding author, Instituto de Posgrado en Psicoterapia Cognitivo Conductual, <https://orcid.org/0000-0003-0252-6252>. Email: daisy.zanzan@gmail.com

b Universidad Autónoma del Estado de Hidalgo, <https://orcid.org/0000-0002-0943-9074>. Email: jose_castillo@uaeh.edu.mx

pandemic is technology, which allows us to have access to information quickly, however an infodemic has been generated around of the subject, much of the information to which one has access is wrong and distorts, which generates incorrect ideas in people, impacting their emotions and actions, when making decisions to face the contingency (Organización Panamericana de la Salud [OPS], 2020).

In Mexico, the panorama due to the COVID-19 pandemic and due to the rapid spread and accelerated growth that characterizes it, a Health Emergency was declared due to the SARS-CoV-2 virus, launching what was called the "Day of Susana Distance", where one of the main measures is precisely keeping distance and initially being in confinement, having only the services considered essential to face the pandemic open, using the resource of technology to work or study from home for example (Alcocer, 2020; El Consejo de Salubridad General, 2020).

In the health sector, like the rest of the population, they had to generate a readjustment, in their way of intervention, with the information that was continuously updated regarding COVID-19, they were facing "something" that was new, at first without much information to proceed, adding the fact of having to wear special protective equipment to be able to do their usual work, adding the work characteristics they already had, such as long hours, sometimes few material resources, for the intervention and now the users in several cases did not collaborate, inevitably many fears began to appear, regarding themselves their family, the attitudes, behaviors of the population in general towards them, the protection material to be able to carry out their work, etc., being constantly exposed to all these elements, also seeing the pain and suffering of the users, and how some were unable to take the necessary measures. of the Healthy Distance Day, saturating health services, adding to it the other pathologies that were already being worked on and could not be left aside, this would lead to acute and chronic stress, which would manifest itself in burnout, depressive symptoms, anxiety, exhaustion out of compassion, his attention capacity was reduced, losing some elements for his interaction with the patient, such as empathy (González & Pérez, 2011; Delgado et ál., 2011; Fernandes & Araújo, 2020).

Health personnel, especially those who are on the front line dealing with COVID-19, have repercussions on a physical and social level, also on a psychological level, something that had not been considered at first, since all efforts were focused in strategies to slow down contagion, mental health becomes a priority in this sector, since medical care is not something that can be stopped in the face of contingency and if it is not attended to, at some point it could incapacitate the staff, in a first At this time, it would be necessary to know how the mental health of health professionals who are facing the intervention in the pandemic generated by the SARS-COV-2 virus presents itself (Camargo & Rizo, 2016).

Knowing how the mental health of health professionals has been affected, within the current context of the pandemic, will give the guideline to explore what has been proposed in this regard to mitigate the effects that affect their mental health and how they are perceived before. This, for this, a review of strategies on care and self-care in mental health aimed at health personnel in the face of intervention in the pandemic generated by the SARS-COV-2 virus will be carried out.

METHOD

For the search and location of the information, an online review was made, using the Google search engine and academic Google with keywords combined and linked to the research topic such as: COVID-19, SARS-CoV2, health personnel, mental health, pandemic, empathy, implications, infodemic, social stigmatization, care, self-care, risks, damage, coronavirus; what I carry, research and review articles, as well as pages of organizations specialized in the subject such as the World Health Organization and the Pan American Health Organization, which contained various files related to the subject, were also considered some government pages having different options of documents that substantiated the actions carried out in various countries.

To consider the information to be used, the following inclusion criteria were taken: to present information related to some aspect of the topic, to present in most of the documents a publication date of no more than 5 years, to have a record such as DOI, ISSN or ISBN, it was also considered to be endorsed by an organization, be it government or scientific.

Factors involved in the mental health of health professionals who are in the front line of care for COVID-19

In December 2019, a new virus emerged in China, which directly affects humans, called SARS-CoV2, being the cause of what the World Health Organization (WHO) called COVID-19; The speed with which this virus spreads in different regions of the world led to a state of pandemic being declared on March 11, 2020, (Díaz-Castrillón & Toro-Montoya, 2020), to mitigate the rise in infections, each country implemented various protocols.

In the case of Mexico, a health emergency is declared on March 30, 2020, (El Consejo de Salubridad General, 2020) launching the healthy distance day, with the aim of protecting and avoiding, as far as possible, the growth of contagion and promoting access to timely medical care if required (Alcocer, 2020).

The strategies that were implemented to deal with the pandemic brought with them sequels in the balance of the different spheres that make up health (social, psychological and physical) that the WHO refers us to, (Camargo & Rizo, 2016; Cuartas et ál., 2020), that is, in the face of the drastic change of relating, to prevent contagion, there is a negative and significant impact on both physical and mental health in all sectors of society, (Hernández, 2020; Hernández, 2020b) since isolation is not typical of human beings, leading to uncertainty, emotional discomfort, problems in interpersonal relationships, etc., negatively impacting mental health, (Torres-Muñoz et ál., 2020), which, according to the WHO, is when the human being becomes aware of himself, with tools to face conflictive situations in daily life, being able to function in his social media (Camargo & Rizo, 2016; Cuartas et ál., 2020).

One of the sectors of the population affected in their mental health are health professionals, especially those who are in the front line of COVID-19 care, (Comité Permanente entre Organismos [IASC], 2020) in the face of this, some studies have been generated, such as those by Huang Jizheng et al. where the psychological state of health professionals was investigated, with the purpose of intervention proposals (Lozano-Vargas, 2020); In Mexico, health personnel are not exempt from manifesting some symptomatology in their mental health, given

all the factors immersed in the development of their interventions (Gutiérrez et al., 2020),, some of these factors were present even before the pandemic and when it was declared, they only became more accentuated.

Among the factors we find the workplace, where both the International Labor Organization (ILO) and the WHO consider it to be a risk at a psychosocial level as well as the organizational climate in which they operate, if this is positive, it will be easier for them to adhere generating elements of well-being on a personal level, favoring their mental health, unlike if it is a negative environment, which can sometimes be influenced by power struggles and hierarchies, hindering work; Another element is the long hours of work and excessive workload to which they are subjected, as well as the lack of supplies and budget for their professional activities, including low salaries (González & Pérez, 2011),, which are accentuated even more, under the circumstance of the pandemic by COVID-19, since the information to act is insufficient and changing, coupled with the uncertainty of the lack of minimum necessary protective equipment (Cuartas et ál., 2020).

Another of the factors that were found was at a personal level, such as the characteristics of professional training, which were described as highly demanding and adverse environments to which they are subjected, in the same way, empathy was found, which is considered a ability at a social level that is subject to several components in health personnel, such as work spaces, professional personality characteristics, etc., it was found that the greater the progress in academic training, the less application and development of empathy was in professional practice, affecting their interventions and their professional satisfaction (Delgado et al. 2020). Another element that was taken up again is motivation, which is considered as the force required to successfully generate productivity, therefore, depending on each one of the professionals, we speak of motivation at the level of economic compensation or retribution level at an emotional level, favoring both mental health and impacting the quality of care it offers (González & Pérez, 2011). Currently the health personnel who are working against COVID-19, are constantly generating adaptations in their daily lives, due to this new biological agent and its implications, with this another of the factors that were present has to do with its configuration personal, that is, their thoughts, behaviors, and emotions in the face of the situation that is being experienced (Hernández, 2020; Hernández, 2020b), and that is presented as: the probability and fear of becoming infected, as well as the negative response that users present, having to isolate themselves , being exposed to the pain and suffering caused by the disease favors the feeling of guilt, the imminent death that occurs in many cases, whether of users, themselves or a loved one, that their family got sick and they cannot do something to the In this regard, little information regarding the disease puts them in ethical dilemmas, leading them to make hasty decisions, that the demand for care is overwhelming, users who are They are experiencing their own crisis or negative emotions and discharge the lack of supplies and protective equipment, physical and emotional exhaustion, as well as estrangement from their loved ones, overexposure of the media, etc., on the health professional, (Lozano-Vargas, 2020; IASC, 2020;

Ministerio de Salud [MINSA], 2020; Hernández, 2020; Hernández, 2020b; Macaya & Aranda, 2020; Torres-Muñoz et ál., 2020). Another perception that is generated when working with COVID 19 patients is having the feeling of having lost clinical intervention skills and abilities (Torres-Muñoz et al. 2020; MINSA, 2020).

The false information that is distributed regarding the issue of the pandemic generates certain misconceptions in the population, coupled with fear regarding what COVID-19 is, as a consequence, hostile and aggressive behaviors towards health personnel, for the false belief that exists between the link between the disease and them, promoting false stereotypes, this stigmatization favors a greater number of infections, since it leads to behaviors that do not benefit care, such as hiding the disease, not seeking medical help timely and not having healthy behaviors, thus facing what is known as discrimination due to social stigmatization, which obstructs their professional work, leading to risk factors for their mental health (Fernandes & Araújo, 2020; OMS, 2020b; OPS, 2020; Gutiérrez et al., 2020).

Repercussions on mental health in the face of the intervention of front-line health personnel in COVID-19 care

The various factors that exist and have a negative impact on the mental health of health professionals, who are exposed to interventions in relation to COVID-19, due to the significant modification that occurs in relation to their routines and styles of work. life, has brought with it disorganization at a cognitive, behavioral, emotional and physiological level that favored the development of some problem in their mental health, which by not identifying or assuming it, led to behaviors that put their physical or mental integrity at risk, such as the use of drugs, alcohol, suicide attempts, etc. (Esperidião et ál., 2020; Santillán, 2017; Torres-Muñoz et ál., 2020; IASC, 2020; MINSA, 2020), this directly influences not only their personal life but also their work life, affecting decision-making and the quality of interventions that are making; these effects are occurring in the short term and in the long term, impacting their quality of life (Hernández, 2020b), the problems at the mental health level that are occurring in health personnel, are correlated with the alterations at the individual and social level to which they are subdued.

Stress is the main response that occurs in health personnel; usually it has certain coping strategies to deal with this response favorably, however, in the face of this event, the majority have stated that it exceeds them as it is chronic, (OMS, 2020; MINSA, 2020; Hernández, 2020), it is considered that the function of stress is to activate the fight system and flight, to safeguard physical and emotional integrity, this response is based on previous coping experiences and the interpretation of the event in question (Santillán, 2017); however, in the face of the pandemic, stress is the starting point to trigger what it is: acute stress, depressive symptomatology, anxious symptomatology and post-traumatic stress disorder; each one has its specifications and characteristics presented within the context of the pandemic, this information is presented in Table 1, these being the most used that are being presented in health professionals and that are correlated with stress.

Table 1

Alterations found in health personnel related to stress.

Change	Correlation with health personnel in response to COVID-19 care
Acute stress	It was found that when health personnel are exposed to the stress that implies, at a work and personal level, being on the front line of COVID-19 care, due to all the implications that it entails, the stress became acute in some cases. Acute, it is considered as a transitory disorder where the person has been exposed to a traumatic situation such as in this case all the implications of COVID-19 care and which are correlated with death, where they are presenting characteristic symptoms where they are perceived as vulnerable and their ability to adapt is negative, it was also found that they present dullness as well as inability to assimilate stimuli, appearing disoriented, manifesting hypervigilance, with problems falling asleep, causing significant clinical discomfort and incapacitating their normal functioning, this symptomatology in some cases sharpens significantly (MINSAs, 2020; Santillan, 2017; Macaya & Aranda, 2020).
Depressive and anxious symptoms	As a characteristic, it was found that health personnel who are subjected to chronic and acute stress, generated by the COVID-19 intervention and its connotations, are frequently presenting depressive and anxious symptoms, associated with personal and family-related situations, stating, sleeping problems and anguish, in some cases it has even led to a suicide attempt (Cuartas et al., 2020; Gutiérrez et al., 2016), when talking about depressive symptoms, it was found to be the most prevalent and in some cases it can become chronic, health personnel say they feel sad and lack energy to carry out their daily activities, it has become serious, affecting all the areas where they work, expressing guilt or uselessness to face their activities presenting difficulties eating or sleeping (Camargo & Rizo, 2016; MINSAs, 2020). On the other hand, the presence of anxious symptoms will help them to face their interventions, the problem is when it exceeds the limits of functionality and incapacitates the professional, as is the case of health personnel who care for COVID-19 (MINSAs, 2020).
Post traumatic stress disorder	The event of the pandemic and care against COVID-19 and the factors to which health personnel are exposed is considered a highly stressful and traumatizing event, coupled with the intense anxiety that is generated in the presence of stimuli that remind this event constantly, leading him to present significantly clinical and disabling discomfort, it is characteristic that vivid memories occur in dreams or intrusive thoughts in relation to the stressful elements of his intervention against COVID-19 and the pandemic, this symptomatology is present beyond a month leading to deterioration in their areas of functioning leading them to present post traumatic stress disorder (Santillan, 2017).
Burnout síndrome (BS)	his entity occurs exclusively in the workplace, it is also known as the burning syndrome; In the seventies the term appeared and it occurs due to chronic stress, which is characterized by a feeling of lack of energy or tiredness, negative thoughts regarding work and low work efficiency, this can lead to other mental health problems. , reducing their quality of life, many cases go unnoticed since it is correlated with the normalization of an overload of work (MINSAs, 2020; Macaya & Aranda, 2020; González & Pérez, 2011); characteristic alterations such as emotional exhaustion, depersonalization and lack of personal fulfillment were found in the Mexican population. (González & Pérez, 2011). There is a variant of Burnout Syndrome known as compassionate wear, where a key element is empathy, a resource to carry out interventions and understand the user; however, if it is not regulated, it can be counterproductive, minimizing response capacity and emotional well-being. This develops when being constantly subjected to stress, trauma or tension in the intervention with the users and very specific situations of pain and suffering, presenting incapacity on the part of the professional to generate energy in their interventions, having somatic symptoms such as headaches. head, as well as avoiding certain elements of interaction with the user, in the same way he will present psychic dullness and hyperactivity, this being sudden (González et al., 2018). With the characteristics exceeding the one already had in the workplace for health personnel, especially those who are on the front line of COVID-19 care, in some cases it is leading them to develop this syndrome and its variant.

Note: Table prepared by the authors, where the alterations related to the most common stress identified in health personnel (Camargo & Rizo, 2016; Cuartas et al., 2020; González & Pérez, 2011; González et al., 2018; Gutiérrez et al., 2016; Macaya & Aranda, 2020; MINSAs, 2020; Santillan, 2017).

Health personnel, when facing the stressful and traumatic event that the COVID-19 pandemic implies, are presenting different reactions and are depending largely on personal characteristics and their coping strategies, as well as contextual elements, diversifying the behaviors of action they are presenting (Santillán, 2017).

Care and self-care to promote mental health in frontline healthcare professionals in COVID-19 care

The impact that the pandemic event has on health personnel depends a lot on the factors that are present, as well as the personal resources they have to face it, coupled with the self-care and care measures that they are managing to face the changes generated as a result of COVID-19, (Hernández, 2020), when talking about self-care, reference is made to the fact that health personnel have the ability to prevent illnesses and promote health in this mental case, having personal resources to face them with or without additional support , (MINSAs, 2020), thus reducing the impact that stress is causing and preventing

the appearance of any mental health problem, (Lozano-Vargas, 2020; Macaya & Aranda, 2020), these self-care procedures involve managing behaviors that benefit the mental health of health personnel in a practical and simple way. day by day, it is

a wide range of actions that were found, which are shown in Table 2, these were pigeonholed into 3 areas, depending on where they are having an impact, that it can be on an emotional, physical or social level.

Table 2
Self-care in health personnel against COVID-19

Alterations	Correlation with health personnel in response to COVID-19 care
Crisis	another situation in which, according to what health professionals who are on the front line of COVID-19 care refer to, is what is known as a crisis, where their coping strategies are collapsed and exhaustion is perceived as excessive. So when this state occurs where the person perceives themselves exhausted, helpless, confused, in disorganization in relation to their work and interpersonal activities, with the inability to face the situation using the resources that they usually use, we can call it a crisis (Slaikeu, 1996), crisis do not occur as a result of stress like the entities that we reviewed previously, however these could be confused since they present similar characteristics, let's review the differences between crises and stress, (Santillán, 2017), generally when suffering a crisis we will find that people perceive themselves exhausted, helpless, confused, in disorganization in relation to their work and interpersonal activities, in a crisis they are more open to receive information and strategies, which does not happen in stress, crises are considered in a relatively short time, stress amplifies over time (Slaikeu, 1996).
Adjustment disorders	Adjustment disorders are also manifesting in health personnel who are facing COVID-19 care, these interfere with their interpersonal relationships, presenting intense emotional discomfort, which affects the environment where they operate, part of the symptomatology What occurs is that they tend to be sad and anxious, and perceive themselves unable to face the pandemic and its implications, diminishing their ability to carry out plans for the future, they have come to present explosions of violence accompanied by a deterioration in their daily routine, usually occurs a month after the triggering event (MINSA, 2020).

Note: Table prepared by the author, where the most common self-care measures identified in health personnel are compiled to promote mental health based on Slaikeu, 1996; Santillán, 2017; MINSA, 2020.

The WHO and PAHO have been proposing information and lines of action regarding COVID-19, also setting support guidelines regarding mental health in health personnel, specifically speaking of the Response in Mental Health and Psychosocial Support (SMAPS) for COVID-19, the SAMPS sought to improve support at the mental health level in health personnel, where it identified and channeled in a timely manner for intervention those who were found to be vulnerable through the Pyramid of psychosocial support to personnel in an emergency situation due to a pandemic, which gives stages for corresponding attention in mental health at first, suggested that it is important to take care of

basic needs, not leave them for later, where the requirements must be met, considering protection factors, care and self-care, as well as direct intervention by specialists depending on the case Hernández, 2020; Organización Panamericana de la Salud [OPS], 2020b). Each country took into consideration the recommendations generated by these organizations, and implemented intervention and care strategies in mental health in their health personnel, this care was adapted to 3 groups that are related to the work area, at the personal level and when symptomatology is already present with respect to the field of mental health as can be seen in Table 3.

Table 3
Care in health personnel against COVID-19

Emotional self-care	Self-care at a social level	Physical self-care
Do not overload yourself by watching the news in the media	Have emotional contact with your loved ones even when you cannot have physical contact	Eat a healthy and balanced diet
Breathing exercises.	Adequate constructive communication with colleagues and users.	Use your time in a managed way
Make use of religious or spiritual beliefs.	When Intervening with another, be kind to yourself, otherwise something can be done.	Exercise regularly.
Avoid consumption of alcohol or other substances to cope with the circumstances		
Generate a flexible routine, these routines favor the structuring and organization of thoughts and emotions.		
Consult information in reliable sources. When you recognize emotional discomfort and scope that interferes with your daily activities, seek and request professional help	It is important to be aware of our limits	Take care of physical health and if you already have a condition, have therapeutic adherence

Note: Table prepared by the author, where the most common and identified care applied to health personnel to promote their mental health is compiled based on González et al., 2018; Macaya & Aranda, 2020; Díaz, 2020; IASC, 2020; OPS, 2020; Lozano-Vargas, 2020; MINSA, 2020; Hernández, 2020; Torres-Muñoz et ál., 2020; OMS, 2020.

It is important that the health personnel set limits and cover first of all the basic needs that they may have, since the erroneous belief was found in the health personnel that one must always be available to the other and secondly, the professional It is true that for the professional to meet the needs efficiently and optimally, he must first cover his own needs, as well as seek professional help if required (MINSA, 2020).

DISCUSSION

Throughout this review, it was found that health professionals are facing the presence of a new virus called SARS-CoV2, which causes COVID-19, which was declared a pandemic by the WHO, where health personnel, had to deal with the available resources at first, considering how urgent and visible it was to confront the virus, however, alternately, there is an impact on the mental health of the health professional, since in a short time there was to adjust to the fact that their routines were drastically modified, to the probability of not having enough protective equipment or supplies, that the information available is limited and that it did not stimulate decision-making, having to face ethical dilemmas, as well such as the probability of becoming infected and dying, being in isolation for the safety of their family, facing social stigmatization and discrimination, due to the excessive erroneous information that circulates, the overload of work, etc.

It must be taken into consideration that to all this is added certain pre-existing conditions in working conditions that could be precarious, plus their own characteristics, all this together

leads the health professional to be in constant stress which can become chronic and acute, giving us necessary conditions, to have a negative impact on mental health, presenting alterations at the behavioral, physiological, cognitive and emotional level, being completely normal and expected for the circumstances in which they are found, however in some cases depending coping strategies or personal resources available, can lead to severe problems, impacting their quality of life, their decision-making and interventions with users, in the short and long term, involving some kind of problem or disorder.

In the proposals to face the impact that the pandemic generated by the SARS-CoV2 virus could have on the mental health of health professionals, it has been reviewed and proposed by international organizations, which suggest adaptation and implementation, to stimulate care and self-care as well as more specialized interventions if the case requires it, seeking to provide all the facilities that this care implies, for this, it is necessary to generate an effort in an integral way, starting with the health personnel, when applying self-care measures and participate in the care measures that may be established, as well as recognize when it is necessary to ask for help from the specialized area, in the same way the corresponding authorities will have to do the same, to advantage the care of their health personnel, reducing impacts in the short term, both for them and for the users, ensuring as far as possible an adequate quality of vines to.

One of the symptoms that will be most present in health personnel is anxiety, to help manage it in the day to day of their work, they can make use of small strategies that help regulate,

for this they will use what known as micro practices which are quick to learn and use, such as washing hands brings self-control, they can be combined no matter how busy the professional is; Another very common element that occurs is compassion fatigue characterized by the inability to generate energy to carry out its work, presenting symptoms such as headaches, avoidance of certain elements of interaction with the user, to help with what compassion fatigue is has considered psychological intervention with techniques predominant to cognitive behavioral therapy.

As a proposal for future reviews, it would be convenient to work on how this care and self-care were structured in the application and the effectiveness it had on health personnel in the short and long term.

REFERENCES

- Alcocer, J. (2020). *Acuerdo por el que se establecen las medidas preventivas que se deberán implementar para la mitigación y control de los riesgos para la salud que implica la enfermedad por el virus SARS-CoV2 (COVID-19)*. Diario Oficial De La Federación. https://www.dof.gob.mx/nota_detalle.php?codigo=5590339&fecha=24/03/2020
- Camargo, E., & Rizo, J. (2016). *Importancia y panorama actual de la Salud mental frente a la Ética Médica*. Boletín CONAMED-OPS, pp. 3-6. http://www.conamed.gob.mx/gobmx/boletin/pdf/boletin14/importancia_panorama.pdf
- Comité Permanente entre Organismos. (2020). *Habilidades Psicosociales Básicas: Guía para personal de Primera Línea de Respuesta a la COVID-19*. <https://www.paho.org/es/documentos/habilidades-psicosociales-basicas-guia-para-personal-primera-linea-respuesta-covid-19>
- Cuartas, V., Cano, A., López, L., & Quintero, J. (2018). *Trastornos del Estado de Ánimo en Trabajadores de la Salud de un Hospital de Tercer Nivel de Complejidad*. Medellín, Colombia, 2011-2016. *Archivos de medicina*, 14(33), 1-7. doi: 10.3823/1397
- Delgado, C., Rodríguez, A., Lagunes, R., & Vázquez, F. (2020). *Relación entre bienestar psicológico y empatía en médicos residentes en una universidad pública en México*. Revista en Investigación en Educación Médica, 9(34), pp. 16-23. <https://doi.org/10.22201/facmed.20075057e.2020.34.19189>
- Díaz, F., & Toro, A. (2020). *SARS-CoV-2/COVID-19: el virus, la enfermedad y la pandemia*. Medicina y laboratorio, 34(3), pp. 183-205. <https://doi.org/10.36384/01232576.268>
- El Consejo de Salubridad General (2020). *Acuerdo por el que se declara como emergencia sanitaria por causa de fuerza mayor, a la epidemia de enfermedad generada por el virus SARS-CoV2 (COVID-19)*. Diario Oficial de La Federación. https://www.dof.gob.mx/nota_detalle.php?codigo=5590745&fecha=30/03/2020&print=true
- Escudero, X., Guarnier, J., Galindo, A., Escudero, M., Alcocer, M., & Del Río, C. (2020). *La pandemia de coronavirus SARS CoV-2 (COVID 19): situación actual e implicaciones para México*. Cardiovascular and Metabolic Science, 31(3), pp. 170-177. <https://dx.doi.org/10.35366/93943>
- Esperidião, E., Saidel, M., & Rodrigues, J. (2020). *Salud mental: enfoque en los profesionales de la salud*. Revista Brasileira de Enfermería, 73(1), pp. 1-2. <https://dx.doi.org/10.1590/00347167.202073supl01>
- Fernandes, M., & Araújo, A. (2020). *Empatía y salud mental en el contexto de la pandemia por COVID-19*. Rev Cubana Enferm, 36(2), pp. 1-3. <http://www.revenfermeria.sld.cu/index.php/enf/article/view/3773>
- González, E., & Pérez, E. (2011). *Factores de Riesgo Laboral y la Salud Mental en Trabajadores de la Salud*. Psicología Iberoamericana, 19(2), pp. 67-77. <http://www.redalyc.org/articulo.oa?id=133921440008>
- Gutiérrez, M., Zelaya, S., Castellanos, E. & Domínguez R. (2020). *Acciones realizadas en Latinoamérica y el mundo sobre Salud mental en el marco del COVID-19*. Instituto Nacional De Salud. <https://docs.bvsalud.org/biblioref/2020/06/1099611/resumen-acciones-realizadas-en-latinoamerica-y-el-mundo-sobre-UUTxIao.pdf>
- Hernández, J. (2020). *Impacto de la COVID-19 sobre la salud mental de las personas*. Medicentro Electrónica, 24(3), pp. 578-594. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1029-30432020000300578&lng=es&tlng=es
- Hernández, L. (2020). *Recomendaciones para el cuidado de la salud mental del personal sanitario cubano ante la COVID-19*. Editorial Ciencias Médicas, 32(1), pp. 1-20. <https://www.medigraphic.com/pdfs/infodir/ifd-2020/ifd2033m.pdf>
- Lozano, A. (2020). *Impacto de la epidemia del Coronavirus (COVID-19) en la salud mental del personal de salud y en la población general de China*. Rev Neuropsiquiatría, 83(1), pp. 51-56. <https://doi.org/10.20453/rnp.v83i1.3687>
- Macaya, P., & Aranda, F. (2020). *Cuidado y autocuidado en el personal de salud: enfrentando la pandemia COVID-19*. Revista Chilena de Anestesia, 49(3), pp. 356-362. <https://doi.org/10.25237/revchilanstv49n03.014>
- Maguiña, C., Gastelo, R. & Tequen, A. (2020). *El nuevo Coronavirus y la pandemia del Covid-19*. Rev Med Hered (31)2, pp. 125-131. <http://dx.doi.org/10.20453/rmh.v31i2.3776>
- Ministerio de Salud (2020). *Guía técnica para el cuidado de la salud mental del personal de la salud en el contexto del COVID-19*. <http://bvs.minsa.gob.pe/local/MINSA/5000.pdf>
- Organización Mundial de la Salud (2020). *En tiempos de estrés, haz lo que importa: una guía ilustrada*. https://www.who.int/docs/default-source/mental-health/sh-2020-spa-3-web.pdf?sfvrsn=34159a66_2
- Organización Mundial de la Salud. (2020). *La estigmatización social asociada a la COVID-19*. <https://www.paho.org/es/documentos/estigmatizacion-social-asociada-covid-19>
- Organización Panamericana de la Salud (2020). *Entender la infodemia y la desinformación en la lucha contra el COVID-19*. Organización Panamericana de la Salud, 5. <https://iris.paho.org/handle/10665.2/52053>
- Organización Panamericana de la Salud (2020). *Intervenciones Recomendadas En Salud Mental Y Apoyo Psicosocial (SMAPS) Durante La Pandemia*. <https://iris.paho.org/bitstream/handle/10665.2/52427/OPSN>

[MHNMCVID-19200026 spa.pdf?sequence=1&isAllowed=y](#)

- Organización Panamericana de la Salud. (2020). *Recomendaciones para adaptar y fortalecer la capacidad resolutive del primer nivel de atención durante la pandemia de COVID-19*. <https://iris.paho.org/handle/10665.2/52729>
- Santillán, C. (2017). *Manual de Intervención del Protocolo de reacción y modelo de intervención psicológica relacionado con el impacto emocional en la población y el estrés postraumático después de un desastre en la CDMX*. Universidad Nacional Autónoma de México. https://ces.cdmx.gob.mx/storage/app/media/manual_intervencion_y_protocolo_reaccion.pdf
- Secretaría de Salud (2020). *Recomendaciones y estrategias generales para la protección y la atención a la salud mental del personal sanitario que opera en los centros COVID y otras instalaciones que prestan atención a los casos sospechosos o confirmados*. Gobierno de México. https://coronavirus.gob.mx/wpcontent/uploads/2020/05/Recomendaciones_estrategias_generales_proteccion_atencion_salud_mental_personal_sanitario_2.pdf
- Torres, V., Farias, J., Reyes, L., & Guillén, C. (2020). *Riesgos y daños en la salud mental del personal sanitario por la atención a pacientes con COVID-19*. *Revista Mexicana de Urología*, 80(3), 1-10. <https://doi.org/10.48193/rmu.v80i3.653>