

Anxiety in Health Professionals in the Face of COVID-19: Systematic Review

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Abstract:- Introduction: The world is going through a health crisis with a great impact on the health personnel who are affected in their mental health. We will mention the anxiety (45%) they suffer in front of the covid-19 who are in the first line of medical care. **Objective:** To analyze the relationship between anxiety and COVID-19 among health personnel. **Methodology:** The search strategy included databases such as PubMed, Scopus, Web of Science, Scielo, Redalyc, LILACS. The search was carried out in Spanish as well as in English published in the last 5 years. **Results:** 52 articles were included and 24 study articles were excluded, only 16 were included in the integrative examination. It was observed that 48% of the publications belong to the Scopus database, 15% to LILACS, 15% to Latindex, 15% to the Web of Science, and 7% to PubMed. **Conclusion:** It was identified that health care personnel are the most affected within the pandemic, which causes anxiety and affects their professional work.

Keywords:- Anxiety, Covid-19, Health Care Workers, Mental Health, Pandemic.

I. INTRODUCTION

Currently the world is experiencing one of the most notable problems in the health sector with a large representation of health personnel who are affected in their mental health within which we will mention the anxiety they suffer in front of the covid-19 (1).

It is clear that this health crisis will not affect everyone in the same way. These mental health complications not only affect the quality of care offered by health personnel, their clinical vision or their decision-making skills, which could hinder the fight against the COVID-19 epidemic, but also have a demonstrative impact on their well-being and quality of life (2).

Anxiety is one of the most common mood disorders in the population. Nursing personnel is qualified as a profession with a high prevalence of psychological

disorders, which participate negatively in the health and quality of life of the professionals, suffering from absence from work and the efficiency of the work carried out, among others (3).

The purpose of this work is to carry out a bibliographic review in relation to the following question: What is the anxiety in front of the COVID-19 in the health personnel?

In the fight against the Coronavirus epidemic (COVID-19), health personnel can appreciate mental health complications, among which we have stress, anxiety, depressive symptoms, insomnia, denial, anger and distrust. The mental health complications in health workers in front of events caused by viral diseases are mainly superior: evaluations obtained through the elaboration of several meta-analyses indicate a high prevalence of anxiety (45%), followed by depression (38%), acute stress (31%), burnout (29%) and post-traumatic stress (19%) (1).

By means of a descriptive transversal study carried out by Huang Jizheng and his collaborators in China from February 7 to 14, 2020, the aim was to know the psychological state of the health personnel who work daily in the fight against the COVID-19 epidemic in such a way as to facilitate a theoretical base for psychological intervention.

Within this study there were 246 participants where they applied the self-assessment scale for anxiety (SAS) and the self-assessment scale for post-traumatic stress disorder (PTSD-SS). A total of 230 questionnaires were recovered with a recovery rate of 93.5. The study included 43 men (18.7%) and 187 women (81.3%), aged 20 to 59 years, of whom 70 were doctors (30.4%) and 160 were nurses (69.6%).

The rate of anxiety among health personnel was 23.04% (53/230). Among them, the incidence of severe anxiety is mentioned and detailed with 2.17% (5/230), moderate anxiety with 4.78% (11/230) and finally mild anxiety with 16.09% (37/230) respectively. The rate of

female anxiety was mainly with 25.67% (48/187) compared to men with 11.63% (5/43). Another information that stands out significantly is the rate of anxiety among nurses was higher obtaining 26.88% (43/160) while doctors give a result with 14.29% (10/70) (2).

Lai et al. conducted a cross-sectional study in a hospital in China (Wuhan) with 1257 health personnel on the date ranging from January 29 to February 3 this year, this study was conducted in order to examine the levels of both depression, anxiety and stress they suffer. The professionals who carried out the survey detailed symptoms of depression with 50.4%, anxiety 44.6% and reaction to stress with 71.5%. Nursing professionals (women) and physicians who are in the front line of medical care for reasons that they remain in direct contact with infected patients or who are in suspicion are those who are significantly exposed to having a high-risk involving symptom such as depression, anxiety and stress (3). This research is based on the bibliographic compilation by means of reliable and scientific sources, focusing on the anxiety suffered by the health personnel in front of the current epidemic COVID -19.

This disease has been a problem that is affecting the general population worldwide, as well as health personnel who are dealing with this problem on a daily basis, exposing themselves to greater risks or having complications that risk and influence their quality of life, as well as influencing their relationship with their family and the fear of exposure to the risk of being infected. Through this work we intend to achieve a better academic level of knowledge to acquire more information and learning about the different aspects of anxiety in health personnel against COVID-19, this will provide us with a positive way for what refers to our subsequent studies.

On the other hand, the nursing staff is in charge of watching over life, which is why we can highlight the level of responsibility they carry due to different factors such as workload, long hours, among others, which can generate a level of stress that can lead to anxiety and depression. Florence Nightingale had diverse problems that to confront within them lack of hygiene, hypothermia among other diseases thus from the beginnings of the infirmary has had to entail different stressful circumstances that are own of the profession demonstrating that to take care of requires a physical and psychological state appropriate to offer aid and adapting to diverse situations at world-wide level.

It is recommended that the professional has the ability to lead a healthy life (adequate nutrition, physical exercise) in order to identify in different situations signs of stress so that they can educate themselves to cope with either having positive thoughts, establish limits and share anxieties that are presented to colleagues. When a constant harmony is maintained between the essential characteristics of the organization and the nursing staff, it is possible to reduce stress levels, thus optimizing mental health (1).

Health professionals faced with the fight against covid 19 faced great pressure because of the great danger of contagion, during the early stages of this emergency, health professionals may show signs of depression, anxiety that can impact on care as well as wellbeing for this reason it would be appropriate to develop techniques for psychosocial interventions. The experience in Hunan is that preventing problems in the mental health of the professionals is to provide a space for rest and isolation from their families, proper nutrition, information on the management of implements and protective supplies as well as on coping with stress and promoting visits from psychologists in order to provide the necessary support (3).

The World Health Organization (WHO) declared a health emergency due to the Covid-19 pandemic that spread in late January of this year. Due to this outbreak, several complications occurred, among them affecting more the Health Personnel being a population more vulnerable to the Covid-19 so they have direct contact with the affected patients, this causes the Health Personnel to present negative emotions in a way that shows anxiety and also psychological reactions.

This causes health personnel to present negative emotions in such a way that they show anxiety and also psychological reactions. Health personnel generate a professional environment that has numerous expectations, this makes their responsibility increase in an effective way that is presented to the situation; however, they are more exposed to the contagion and be affected, if not also participate in the pain and suffering of each patient carrying the COVID-19, which, from the psychological point of view, health personnel are more vulnerable.

According to the research of Xiang Y.T and his collaborators through a study in the Beijing Hospital, that health workers show greater signs of post-traumatic stress in professionals who are in a high risk environment during the propagation of COVID-19 in the same way with the results refers that the epidemiological data does not know how to respond to these challenges on mental health problems as well as to the professionals and patients that this pandemic is affecting.

However, it should be noted that authors and international United Nations and associations have been published on the basic principles of interventions in psychological emergency crises that involve general guidelines for risk situations (4). A Colombian general practitioner's account of this problem is alarming because they do not have the necessary supplies such as individual protection equipment, the lack of medical personnel and long working hours.

It is therefore very important to ensure that doctors have a wellbeing in their physical and emotional health, so they must learn to take care of themselves or through the help of their colleagues within the workplace because they play a key role in mental health care of patients providing

emotional support including their families to cope with the covid infection.

The covid-19 pandemic will be present as a stressful situation and it is believed that medical personnel need job security in addition to psychological care so that they can be certain to provide optimal care for patients with this health problem (5).

The Covid-19 pandemic constitutes an unprecedented global health emergency. This disease reached Latin America, first Brazil, then Ecuador, which has caused saturation in health centers and hospitals because people did not cooperate in quarantine, which has produced stress and anxiety in the health personnel who attend 24 hours a day to patients who have this disease. The repercussions of Covid-19 are great, at the economic, social, cultural, and educational levels, but above all on the countries' health systems and their personnel.

Doctors, nurses and other health workers are the mainstay of this pandemic, they offer their services every day and with great burdens, and they are also at risk of suffering from post-traumatic stress disorders because they are exposed to various situations and have several hours of work, since their health, as well as that of their families, is at risk.

The picture is clear as millions of people around the world stay at home following the government's quarantine for their welfare and to decrease the transmission of Covid-19 and SARS, doctors and health workers have prepared to do exactly the opposite; they will go to hospitals, clinics and health centers exposing themselves to high risk of Covid-19.

The situation in hospitals is complex, as there is not only uncertainty and intense pressure on triage services, but also physical and mental exhaustion, the torment of difficult decisions, and the pain of losing patience and colleagues, all of which adds to the risk of infection.

An important point is the infrastructure and equipment available in hospitals and health centers. As the pandemic grows, access to all personal protective equipment (PPE) for healthcare workers is one of the key concerns. Medical personnel are a priority in many countries, but low PPE procurement has been described in the most affected facilities.

Health care workers, while waiting for equipment, care for those who may be infected with the virus or receive equipment that cannot comply. In addition, there is concern for their personal safety; health workers are anxious about the risk of transmission to their families, with those who have elderly parents or young children at home being the most exposed (6).

Health personnel working in the health area and hospitals present a level of anxiety, stress, depression and concern to adverse feelings or emotions that are affected by the saturation of the medical and care system as happened in Italy, Spain and China before these problems it is said that mental health can be affected by the lack of inputs and materials that may have a probability of contagion, for which reason it reduces the quality of services of the medical professional to people infected by the virus. The use of tele-psychotherapy makes it possible to have a wider vision of the individual problems and of how patients face the crisis that may occur, as well as to provide the health personnel with the necessary emotional support and the increase of the adaptive behavioral repertoire in these situations, which can make, consequently, that they carry out their daily work in a more adequate way and support better the heavy emotional or affective load to which they are being submitted (7).

Coronavirus 2019 disease (COVID-19) originating in Wuhan has spread throughout China since the beginning of December 2019, seriously threatening the health of humanity. On January 30, 2020, the World Health Organization (WHO) announced the new coronavirus pneumonia pandemic, later renamed COVID-19 as a Public Health Emergency of Global Concern. According to statistics from the National Health Delegation of the People's Republic of China, 81,054 confirmed cases, 687,680 suspected cases and 3261 deaths have been reported in mainland China as of 24:00 on March 21, 2020. The outbreak of COVID-19 as a historic health care event has had a negative impact on daily life, threatened the health of people both brain and body, and put social and economic progress at risk. In the face of such severe circumstances, the government and the health department have issued several prevention policies.

People unaware of public health emergencies showed inferior mental health recovery and social support, and tended to possess psychological abnormalities in interpersonal impression and anxiety. Also, from working on the front lines. The absence of social support generates much more depression and anxiety, mainly in high-risk work situations. To prevent cross-plague, social distancing between people had to be increased. When others had ailments such as temperature or cough, people became more vulnerable and tended to exhibit some obsessive-compulsive symptoms, such as frequent hand washing. The increasing number of confirmed cases and deaths also increased the level of distress and phobia among health care workers. However, all of the experienced personnel currently involved in public health emergencies such as SARS and H1N1. They knew how to best defend themselves and had the confidence to excel from the illness at parity with new staff, which was favorable to optimizing their resilience and mental health. Therefore, it is significant to have a high level of learning and professional practice in health care workers involved in public health emergencies, primarily for new staff (8).

➤ *Psychological implications for the general public, patients and children*

The humanity that is facing this pandemic presents an increase of psychological pressure that resulted in a great psychological impact as a consequence of the outbreak of COVID-19 in China, where it originated. They stated that a third of the participants announced anxiety that was moderate to severe, unlike the half that estimated the psychological impact as moderate-severe (12,13).

In addition, there has been a large increase in phone calls and visits to patients who are somehow threatened expressing fear, distress and complicating patients with mental health problems that tend to present with depression and anxiety also with panic attacks for being carriers of symptoms of the virus all as a consequence of the COVID-19 (14).

In the scope of the childhood it has been manifested that they are less susceptible to the infection by COVID-19, nevertheless, also they are participants of presenting restlessness, fear like their parents to the contagion, that express manifestations of anxiety like attacks of panic and psychosomatic symptoms (15). The objective in the present investigation was to analyze in the literature the anxiety in the health personnel in front of the COVID- 19.

II. METHODOLOGY

➤ *Type of research*

A systematic review of the literature was conducted. In carrying out this process, the recommendations of the PRISMA statement were followed.

➤ *Search strategy*

The search occurred in databases such as PubMed, SciELO, Redalyc, SCOPUS, Springer, Taylor and Francis, Web of Science, Proquest, Ebook Central, Fielweb, EBSCO.

For the search we used the keywords related to the desired objectives, according to the terms Mesh and DeCs: "Anxiety" AND "Mental Health" OR "Health Personnel" OR "Psychological Impact". The intersection between these descriptors, using the Boolean type connections AND and OR In addition, observational reports (cross-sectional and prospective studies on anxiety in health care workers) were also considered.

➤ *Inclusion and Exclusion Criteria*

The selection of scientific evidence included the following: empirical scientific articles and books, doctoral theses, both in Spanish and English and published in the last twenty years. Thesis type studies (undergraduate), monographs and argumentative essays, impossibility to recover the full text of the article and article/s repeated from a previous search were excluded.

➤ *Procedure*

In the first stage, the topic was identified and the research question was formulated in the PICO (Population,

Intervention, Control and Waste) acronym format: "What was the anxiety in the health personnel?"

The second stage applied the inclusion and exclusion criteria mentioned above. Then, in the third stage, the primary selection of publications was made by reading the title and the abstract.

In the fourth and fifth stage, the evaluation of the studies was carried out with more criteria (according to the objectives set), and the interpretation of the results obtained, so that it would reach the sixth stage where the formation of the discussion and synthesis of knowledge was given. A systematic review was provided with rigorous and exhaustive scientific information with studies of more and better relevant information, without introducing information or publication bias, in such a way that the contribution to the scientific community.

III. DISCUSSION

The analysis of the 16 selected articles has been completed to determine what the relationship of the health personnel together implies in terms of anxiety.

➤ *Complications of COVID 19 in health personnel*

The authors, Lozano-Vargas, Muñoz-Zambrano, Jian, Tsamakís, Pérez-Ortega, Mallen, Teixeria, Wenpeng, Torales, Gutiérrez-Álvarez, contribute that in the fight against the Coronavirus epidemic (COVID-19) there are complications that affect the Health Personnel being a more vulnerable population so they are more exposed to the contagion and being affected, In addition to being a participant in the pain and suffering of each patient carrying the COVID-19, this causes health personnel to present negative emotions showing psychological signs affecting mental health, causing physical health stress, insomnia, denial, anger, and mental and emotional distrust and can even lead to depression and anxiety that can impact the quality of care provided by health care providers, their clinical vision, or their decision-making skills, which could hinder the fight against the VOCA-19 epidemic, but also have a demonstrable impact on their well-being and quality of life (1,2,3).

According to the research of Xiang Y.T and his collaborators through a study in the Beijing Hospital, that health workers show greater signs of post-traumatic stress in professionals who are in a high risk environment during the propagation of COVID-19 equally with the results refers that the epidemiological data does not know how to respond to these challenges on mental health problems as well as professionals and patients that this pandemic is affecting (4,7,8). Aspectos relacionados entre la ansiedad y el personal de salud.

Authors Greenberg, De la Cruz, Ayanian(10,14,15), contribute that COVID-19 is an unprecedented public health emergency, that nurses should be highly protected against COVID-19. An important point is the infrastructure and equipment available in hospitals and health centers. As the

pandemic grows, access to all personal protective equipment (PPE) for health care workers is one of the key concerns. Medical personnel are a priority in many countries, but low PPE procurement has been described in the most affected facilities.

Health care professionals who care for patients with Covid-19, have severe mental health symptoms and women are more likely to have severe symptoms of depression, anxiety and psychological distress than men, the factors that cause this are Caring for a progressive number of patients with illnesses, caring for co-workers who may become seriously ill and sometimes die from Covid-19, lack of personal protective equipment that intensifies fears of contracting the coronavirus at work leading to serious illness.

The COVID-19 pandemic has generated a variety of complications, including affecting the mental health of healthcare workers, as they are more vulnerable to contracting the virus, which has caused an environment of anxiety especially for patients who are carriers of the virus. COVID-19 has been involved in mental health causing depression, post-traumatic stress crises, for which health personnel have had to develop their skills in a more practical and precise way (6,11,13).

The author Caballero C, contributes that the World Health Organization suggested the social isolation, limitation of mobility or quarantine of the population to avoid the propagation of infection and thus to avoid the collapse in the health areas, social distancing generates adaptive and non-adaptive blockages as it can increase the possibility of having mental problems or resort to pre-existing mental disorders, in China doctors who checked their first cases of COVID-19 presented symptoms of emotional trauma in the same way nurses showed symptoms of loss of appetite, fatigue, fear and despair (12).

The author Campo-Arias A, the study of the mental health of nurses in the United States shows that nurses have faced challenges in their mental health with the outbreak of various infectious diseases throughout their careers, so it is important to ensure that physicians have a healthy physical and emotional well-being and learn to care for themselves and their colleagues in the workplace. They play a key role in mental health care for patients by providing emotional support, including family members, in coping with covid infection. 19 (5).

➤ *Mental health in the health staff*

The author Huarcaya (3), contributes that health personnel have found mental health problems, especially in female professionals, since those who work directly with suspected or confirmed cases of COVID-19 of such consider it important to prevent problems in the mental health of professionals by providing a space for rest and the isolation of their families, proper nutrition, information on the management of implements and supplies of protection in the same way as on carrying stress and promote the visit of psychologists and provide the necessary support.

IV. CONCLUSIONS

At the end of this bibliographic review on covid-19 anxiety in health personnel we can conclude that health personnel are in a constant fight against covid-19 since they remain in direct contact with it, in such a way that they are in constant danger of contagion.

In addition to this, as a consequence of this, it has provoked an environment of anxiety, stress and psychological disorders in society at a global level, so that all of humanity feels threatened by this Covid-19 Pandemic that has spread rapidly. However, patients who are carriers of this virus are in panic, especially in these areas. The health personnel is constantly pressured due to the priority attention to patients who present covid-19, this has generated a problem in the mental health like the anxiety given by the deficiency of elements of biosecurity, workload and by the fear to the contagion reason why the world-wide organization of the health (WHO) has chosen to offer certain considerations within which we can mention to make flexible schedules, to offer equipment of individual protection, psychological attendance in addition to certify periods of rest.

In this way we consider that health personnel play an important role in this area, standing out in a positive way within their medical interventions, also offering their care to a patient affected by the COVID-19. However, professionals need psychological support to be able to provide quality care and thus persevere in the security of both themselves and the patient.

It would be interesting to carry out empirical studies on anxiety in the face of the health emergency due to the COVID-19 pandemic (17,18,19) related to emotional (20) and educational aspects (21).

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CONFLICT OF INTEREST

There are no personal, professional or other conflicts.

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