

Anxiety and Depression in Health Professionals Dedicated to Teleworking at the General Hospital of the IESS of the City of Machala

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Abstract:- Health systems are facing the COVID-19 pandemic forcing health professionals to have labor and social changes such as telework **Objective:** to determine the level of anxiety and depression in health professionals dedicated to teleworking the General Hospital of the IESS the City of Machala. **Methodology:** A quantitative, descriptive and non-experimental cross-sectional cohort study was carried out. **Validated questionnaires were used:** state-trait anxiety, STAI (1) in the Spanish version, the IDER, or Spielberger's State-Trait Depression Inventory (2) in the Spanish version of TEA EDICIONES. **Sample:** it was 95 professionals who carried out telework in the period from May to November 2020. **Results:** it was identified that the population that carried out telework were Nursing professionals, likewise, some trait of anxiety was identified during teleworking. **Conclusions:** 52.6% of the population is between 26 and 35 years old, 88.4% is female, 52.6% are married, 54.7% belong to the Nursing department, anxiety occurs to some degree in 33.6% and psychological depression in 27.5% of the population and educational intervention for the prevention of anxiety and depression had a positive impact.

Keywords:- Anxiety, Depression, Nursing, Health, Telework.

I. INTRODUCTION

December 2019 Wuhan - China. Became the center of a pneumonia outbreak of which the cause was unknown; that is, that it was atypical, this aroused attention not only within China but also internationally, so the health authorities of this country began an exhaustive investigation to characterize and control the disease, where they included epidemiological and clinical data collection studies, The etiology of the new coronavirus (CoV), which until then was unknown, was confirmed to be a virus of the Coronaviridae family, which was affecting the health of patients in Wuhan (3).

The coronavirus is very similar in terms of genome sequences to six previously discovered coronaviruses. An analysis of its genetic sequence and homology revealed that the new virus has many similarities to SARS-CoV. This new coronavirus is now classified as beta-coronavirus, responsible for causing severe acute respiratory syndrome (SARS) which is a disease caused by SARS-CoV. The main symptoms of SARS include fever, cough, headache, muscle pain and other symptoms of respiratory infection; its mortality rate is approximately 10%; people older than 40 years or with underlying diseases are at higher risk of developing the fatal disease (4).

On January 30, 2020, the World Health Organization (WHO) declared the COVID-19 epidemic an international public health emergency. This means that the epidemic has spread to several countries, continents and the whole world and affects a large number of people. That is why in several countries around the world have opted for the modality of teleworking, activity that was not easy for some workers, causing levels of stress, anxiety and depression in their daily work (5).

The disease, now known as COVID-19 (Coronavirus disease-2019), continued to spread to other Asian countries and then to other continents (6). On March 11, 2020, the World Health Organization (WHO) declared the occurrence of the COVID-19 pandemic, urging all countries to take action and join control efforts in what appears to be the greatest global public health emergency of modern times (7).

The spread of the COVID-19 disease has led each country to take the measures directed by the WHO, at all levels of the economy of each nation, definitely affecting in the short or medium term the stability and working conditions, generating millions of unemployed that are unprecedented so far, it has also generated anxiety and depression in the working population and especially to health professionals, and the worst and most serious thing is

that it has led to the collapse of health systems, where the population referred to in this study is immersed (8,9).

In that sense, health science professionals have been affected since they have had limitations to reach their workplaces, many of them have died from the virus and in the best case have suffered from the disease and have recovered their health, this has led to take measures in the public health system of Ecuador, where the work systems have been modified in a traditional way. This has led to measures being taken in the public health system of Ecuador, where the traditional work systems have been modified by the implementation of a work method that dates back to the 1970s, but which, given the characteristics of the profession itself, represent a limitation, since it is necessary to make use of communication and information technologies, competencies that have not been trained in health professionals since they are the competence of other sciences or in which their application is much easier (10).

In that sense, in the last decades, the growth and technological development worldwide has been vertiginous, which has brought great changes and advances at all levels, these advances are an element that by their nature the human being has to adapt to their use and also to live with them, since technologies have become a fundamental part for the development, maintenance and survival of humanity, is for that reason, that the technologies of vanguard have been included gradually in different sectors like the protection of the sovereignties, the health, the communication, the production in all the industrial levels, the education, the economy and the finances, the leisure, and even in the attempt to supply to the human being of all those processes that of itself belongs to him to occupy, emerging then the telework (11).

Therefore, these advances and adoption of technologies as elements of importance in the development and evolution of societies make it possible that anyone can work remotely, making use of computers, laptops, tablets, Smartphone just to mention the most current, but can also make use of emails, applications, programs, websites and even the well-known phone calls in all its aspects, but, to make more effective teleworking should take into consideration the technological skills of employees who develop this modality, since most are technological natives, but many are technological migrants (12).

This emerging modality of work, together with the Covid-19 pandemic, has generated anxiety and depression in health workers, which is an adverse effect and also undesirable for the health of workers, so it is necessary to identify various alterations in the state of mental health such as anxiety and depression in health professionals to establish future recommendations to governmental or health institutions, preventive actions or intervention of some other type (13).

The present research is considered relevant, although the notion of studies on the risk of anxiety and depression in health workers is not new, since it has its etymological

antecedents in the field of psychology. These variables are described with greater precision, but when reflecting on the challenges currently faced by health professionals, the relevant role played by their comprehensive training that allows them to obtain knowledge and demonstrate it in clinical practice throughout their work service cannot be ignored.

The importance of conducting this research is based on determining the risk of anxiety and depression in health professionals dedicated to telework of the General Hospital of the IESS of Machala, as a result of the declaration of health emergency made on January 30, 2020 by WHO declares as an international public health emergency COVID - 19, which means that the epidemic has spread worldwide, affecting a large number of people. So many institutions including hospitals had to adopt the modality of telework for their workers at vulnerable risk (14).

Being supported by the Ecuadorian government, which through the agreement of the Ministry of Labor signed with the N°-MDT-2020-076 promulgated the guidelines that in the matter of teleworking would be applied during the declaration of health emergency at national level (10).

Situation is, that has referred altered emotional conditions of workers, due to the new changes presented as, adapt to a space in their homes to perform their telework, adapt to the use of technologies activity that some health workers do not perform, maintain a balance in their work and family time, reorganize so that family activities do not interfere with their work (15).

Theoretically, this investigation is justified in the fact of a theoretical - conceptual review that leads in an immersed way to a critical analysis on the studied variables; such actions, allow to reflect on the anxiety, depression and telework in the health personnel, which allows to contribute a valuable content of theoretical aspects on the risk of suffering anxiety and depression during the pandemic of the Covid-19 by the accomplishment of labor activities for which the professional of the health has not been formed, likewise, it contributes a theoretical reference due to the scarce availability of bibliographical contents related to the variables object of study.

The practical support arises from the benefits generated in health professionals, the recognition of psychosocial risk factors, which allows a better job performance and also favors the development of skills and abilities in the professional praxis, thus recognizing the problems of this context, to give better contributions and improve the quality of care for users.

Likewise, the methodological support of this research is constituted by data collection instruments, which may be applied to the variables under study; in this sense, this methodological tool will be used in similar research works where the characteristics of the sample studied are equivalent to those described in this study, and in turn will serve as a research background for other studies that attempt

to directly deepen other factors or elements of importance that were not taken into consideration in this work.

In that sense the research questions that contribute to the successful development of the study were established, where the following questions were formulated:

What are the sociodemographic characteristics, level anxiety and depression of health professionals with dedication to telework of the General Hospital of the IESS of the City of Machala? How is the relationship of anxiety and depression to sociodemographic variables of health professionals with dedication to telework of the General Hospital of the IESS of the City of Machala? Will an educational intervention strengthen the prevention of anxiety and depression in the population studied?

Risk factors

In order to work efficiently, it is necessary for the worker to be calm, healthy and safe in the labor exercise that helps the integral development of the person in his personal and labor aspirations, in his desires and in the guarantees of protection and social integration (16). However, the work developed in conditions of risk of occupational accidents and occupational diseases increases anguish and damage in the life of the worker due to the absence of adequate, safe and healthy working conditions (17).

Based on this idea, there are other aspects to take into account, such as the definition of risk, which identifies the probability of suffering an event; thus, risks are quantified in probabilities of suffering an event, so that the so-called risk factors are all those variables or characteristics that increase the probability of suffering it. However, there is also occupational risk, conceptualized as the possibility of suffering an accident or illness at work and during the performance of a work activity that does not necessarily have a contractual relationship (18).

It is worth considering that risk factors are characteristic of the work or work environment that can result in physical harm to the worker, that is, the specific ways in which these factors are harmful to the worker can be combined, i.e., the potentially harmful causes can result from repetitive or sustained efforts, intense efforts, stress, exposure and recovery time, to mention some of them (19).

In this sense, the risk identified as the probability of suffering an event, so the risks are quantified in probabilities of suffering an event, the so-called risk factors are those variables or characteristics that increase the probability of suffering it (20).

In this sense, information on risk factors has been used in a variety of ways to evaluate jobs, through different work methods such as checklists and direct observation, where the evaluation of occupational risks is a process aimed at estimating the magnitude of those risks that could not be avoided, obtaining the necessary information to make an appropriate decision on the capacity to adopt preventive measures and, if so, on the type of measures to be adopted,

so the risk analysis must be performed, where the possibility and consequences of the hazard materializing must be identified and assessed (21).

Consequently, risk assessment must be performed, where the risk value obtained can be compared with the tolerable value of the risk, and finally, risk control must be performed, through risk assessment it is concluded which control actions must be taken, either engineering and/or administrative control (21, 22).

Definition of anxiety

Anxiety is a normal emotion that fulfills an adaptive function in many situations, since every living organism needs to have some surveillance mechanism to ensure its survival, and anxiety fulfills this role in many situations, which is why it is normal, and desirable, for a human being to be afraid when real danger is looming (23).

On the other hand, it is considered that anxiety is a state of apprehension, restlessness in anticipation of a danger whose source is mostly unknown or unrecognized, fundamentally of intra psychic origin and that can be seen as pathological when it interferes with effectiveness in life, in obtaining desired goals or satisfaction or with reasonable emotional well-being, that is to say; that anxiety is the result of the activation of the sympathetic tone and of the endocrine system where the adrenal hormones consequent to external stimuli or the result of an endogenous disorder of the structures or of the cerebral function that make evident its characteristic signs and symptoms (24).

In this sense, anxiety disorders are characterized by having anxiety or fear as the main elements of human suffering, so that each disorder refers to a characteristic set of symptoms and sensations that usually appear in the same person, which is called a clinical syndrome (23).

Accordingly, the main anxiety disorders are: panic disorder, agoraphobia, social phobia, specific phobias, obsessive-compulsive disorder, acute stress disorder, post-traumatic stress disorder, and generalized anxiety disorder, so that virtually any anxiety problem can be included in any of the preceding sections, although sometimes the symptoms that occur do not reach the intensity, frequency or impact on social, work or personal life to justify a formal diagnosis of anxiety disorder (23, 25).

It is important to highlight that, in other cases, anxiety reactions are due to stressful personal events, such as separation from a partner or a job layoff, which create a specific difficulty to develop normal daily life, cases that are called adaptive disorder, which occurs when it does not reach the intensity to be an anxiety disorder (23).

Symptoms of anxiety crisis

In this regard, an anxiety crisis is a reaction of intense fear or discomfort that occurs suddenly and reaches its maximum intensity in a matter of two to three minutes, ten minutes at most (23, 25), but to be called an anxiety crisis,

this reaction of intense fear must be accompanied by four or more of the symptoms presented below:

Sensations somatic as

1. Palpitations, heart palpitations, or elevation of the heart rate.
2. Sweating.
3. Tremors or shaking.
4. Choking sensation or shortness of breath.
5. Choking sensation.
6. Tightness or discomfort in the chest.
7. Nausea or abdominal discomfort.

Psychic symptoms (cognitive, behavioral and affective) such as:

1. Unsteadiness, dizziness or fainting.
2. Feeling of unreality (derealization) or of being separated from oneself (depersonalization).
3. Fear of losing control or going crazy.
4. Fear of dying.
5. Sensation of numbness or tingling.
6. Chills or flushing.

Definition of depression

Human beings relate or communicate at the emotional level and react in a similar way to certain negative stressful stimuli, hence the understanding of emotions is one of the main goals of current science, together with understanding and analysis (27). Thus, depression is presented as a set of predominantly affective symptoms such as pathological sadness, apathy, anhedonia, hopelessness, helplessness in the face of the demands of life, among others, although, to a greater or lesser degree, cognitive, volitional and somatic symptoms are also present, i.e., a global psychic and physical affectation, with special emphasis on the affective sphere (2).

In this regard, the term depression is often confused and tends to be misunderstood, as it is too often used to describe normal negative mood states that disappear easily or are transitory in nature. Persistence, severity and the capacity to interfere negatively in the individual's life are the key to distinguish the clinical symptoms of depression from those other negative emotional states and/or emotional fluctuations that are common but do not constitute a disease (27).

This concept highlights the primary alteration of mood, with which it is wished to emphasize that, in its interrelation with the cognitive elements, the latter are secondary, that is to say, the thinking of depressed persons is determined, in the first instance, by the affective tone they present, indicated as emotional dejection (27).

The punctual presence of depression is two women for every man, which shows a higher proportion in women, hence the importance of taking into account the gender relationship when dealing with this pathology, since women have twice the prevalence than men (28). Consequently, clinical depression is considered as a medical condition that affects both women and men and the mood, behavior and

thoughts, so it changes the way a person feels, acts and thinks, and prevents to do things that were easy and pleasant, such as spending time with family and friends, reading a good book, going to the movies or to the beach, in this state take more effort and sometimes are almost impossible to perform, such as eating, sleeping and sexual intercourse, depression can become a real problem (27, 29).

Depressions are grouped not only in a continuum of severity, but also represent the paradigm of the dimensionality of mental disorders, connecting affective disorders with schizophrenia, following the criterion of severity (27):

Stomas depressives.

- Depressive syndrome.
- Melancholic depression.
- Psychotic depression.
- Schizoaffective disorder, affective subtype.
- Schizoaffective disorder, schizophrenic subtype.
- Schizophrenia with depressive symptoms.

Typical depressive episodes are characterized by:

- Depressed mood.
- Loss of the ability to be interested in and enjoy things.
- Decreased vitality, leading to reduced activity level and exaggerated fatigue, which appears even after minimal exertion.
- Decreased attention and concentration.
- Loss of self-confidence and feelings of inferiority.
- Ideas of guilt and of being useless, even in mild episodes.
- Gloomy perspective of the future.
- Suicidal thoughts and acts or self-harm.
- Disorders of the dream.
- Loss of appetite.

Some of the above symptoms may be very prominent and acquire special clinical significance, the most typical examples being (27):

- Loss of interest or ability to enjoy previously pleasurable activities.
- Loss of emotional reactivity to pleasant environmental events and circumstances.
- Waking up in the morning 2 or more hours earlier than usual.
- Morning worsening of depressive mood.
- Objective presence of clear psychomotor inhibition or agitation (observed or referred by third parties).
- Marked loss of appetite.
- Weight loss (5% or more of body weight in the last month).
- Marked loss of libido.

Telework

In reference, telework is defined as a flexible form of organization of work that consists in the performance of this outside the usual space, during a significant part of their working hours, and can be performed part-time or full-time, the author, in its definition further expands the concept, leaves the window open to wonder if there could be mixed

telework, in which the worker is devoted half time to telework and half time to work from the offices (30).

Similarly, telework is defined as an activity where the work goes to the worker, with the use of current technology, telework is a new action that in some European countries is increasing (15).

These definitions, 40 years after its emergence show that there is not a single but multiple definitions of "telework", but all agree that the fact that both characteristics occur simultaneously is what gives telework its particularity (31).

Therefore, in relation to telework there are three modalities described, where according to the literature are the autonomous Telework composed mainly by independent workers or employees who through the use of ICT carry out the tasks, executing them from the places chosen by them, followed by the supplementary Telework, made up of workers who have a labor contract that alter their tasks on weekdays between the business entity and a place outside this entity using ICTs to give their compliance, and mobile Telework in which mobile devices are used to perform their tasks, their work activity allows them to be frequently absent from the office (32).

As for the elements that arise from teleworking, 3 distinctive elements are established to take into account the first of them, is the geographical element, which assumes that teleworking is primarily a type of remote work, so that, to qualify a particular provision of services as a modality of this type, it is required that the services are provided outside the physical center of operation of the company. With all this, it should be understood that it is not necessarily a provision of services from the worker's home, but may involve services provided from any location or place located outside the organization (33).

In second place is the technological element, which is a mechanism that teleworking requires as one of its defining elements for the intensive use of a particular technology that allows precisely the development of a productive task outside the center of operation of the company, so that, these technologies are basically the computer and telecommunications, and enable in practice that the provision of services of the worker is channeled by these means to the employer (34).

In third and last place is the organizational element, in which it is considered that teleworking is not only working remotely and using telecommunications and / or computing, because in his view teleworking is to use these elements to provide service in a different way, therefore, it would not be teleworker all that uses the tools of teleworking, but one who by the fact of using them escapes the traditional model of work organization (34).

However, the changes in science and technology, especially those associated with Information and Communication Technologies (ICT), have been

incorporated into all areas and daily activities as an essential instrument, to benefit the achievement of national, social and economic goals, hence their incorporation into the work entities (35).

A more specific definition of ICTs is provided by the United Nations Development Program (UNDP, 2002), in the Human Development Report, which defines ICTs as the universe of two sets, represented by traditional Communication Technologies (CT), consisting mainly of radio, television and conventional telephony, and by Information Technologies (IT), characterized by the digitization of content recording technologies (computing, communications, telematics and interfaces) (32).

This concept is significant because it includes not only modern technologies, but also the conventional means of social communication: radio, television and the telephone system. From this broader and more inclusive perspective, it is more feasible to consider rural contexts, since in many of them these traditional means of communication still prevail, and it has only gradually been possible to incorporate the most recent ICTs, especially the Internet (36).

Within this context, Ecuador is included, since the new systems mediated by information and communication technology (ICT) provide more and more opportunities for the transformation and development of a new application model in accordance with the new labor trends in the world, where the traditional role of the worker is substantially modified to make way for innovative practices that are in accordance with these new systems to improve the work performance of workers in organizations (36).

In this sense, the Information and Communication Technologies (ICT) are a set of tools, supports and channels for the treatment and access to information that support the worker to know more directly the roles they are expected to play within the so-called new communication technologies, important to develop this activity, a work method that is characterized by the distance from the company (34).

Also, within the objectives of the research was established the general objective as well as the specific objectives that served as a guide for the theoretical and methodological development of the research, the general objective to determine the level of anxiety and depression in health professionals with dedication to telework of the General Hospital of the IESS of the City of Machala, so as specific objectives were proposed to identify the sociodemographic characteristics, level of anxiety and depression of health professionals with dedication to telework, to relate anxiety and depression to sociodemographic variables of health professionals with dedication to telework and to make an educational intervention for the prevention of anxiety and depression in the population studied.

II. METHODOLOGY

A quantitative study with a prospective non-experimental, cross-sectional, descriptive-correlational, non-experimental design will be carried out.

Population

For the following study there will be a population of 110 health professionals dedicated to telework of the General Hospital of the IESS of the city of Machala.

Sample

A simple random sampling was carried out. The sample is constituted by 95 health professionals with dedication to telework, according to the formula Sierra Bravo of 1988, the error (5%) that we make of estimation of the size of the sample, starting from a level of confidence of 99% would follow the following formula:

Inclusion and exclusion criteria

For the study will be considered all the health personnel with dedication to telework, to be a worker of the Hospital of the IESS of Machala and that they accept to participate filling the informed consent. And, health professionals who are working in a face-to-face manner or who are infected by COVID-19 were excluded.

Instrument

Sociodemographic variables: among which the most frequently mentioned are: age, sex, marital status, number of dependents, department, anxiety and depression.

State-Trait Anxiety Inventory (STAI): According to (39) it is the Spanish adaptation of the State-Trait Anxiety Inventory (STAI) (40,41). The STAI is a self-report composed of 40 items (see Appendix C) designed to assess two independent concepts of anxiety: anxiety as a state (transient emotional condition) and anxiety as a trait (relatively stable anxious propensity). The time frame of reference in the case of anxiety as a state is right now, at this moment (20 items) and in anxiety as a trait it is in general, on most occasions (20 items). Each subscale consists of a total of 20 items in a 4-point Likert response system according to intensity (0= almost never/not at all; 1= somewhat/sometimes; 2= quite often; 3= very much/almost always). The total score in each of the subscales ranges from 0 to 60 points.

State - Trait Depression Inventory (IDER): is a very brief inventory (20 items), the IDER was created by the same author of the STAI (32,42) which is intended to evaluate on the one hand the degree of affectation (State) and on the other hand the frequency of occurrence (Trait) that the subject shows in relation to the affective components of depression. In addition, the test items are constructed to assess both the presence of depression (Dysthymia) and the absence of depression (Euthymia). It is therefore a brief and easy to apply tool, which overcomes many of the limitations of previous instruments and is very useful in aiding the

diagnosis of depression and as a research instrument. Administration time of 7 to 10 minutes.

Procedure

The adaptation to the Ecuadorian context will be carried out, accessing the sample, accessibility criteria will be used through digital media, social networks: WhatsApp, the link will also be distributed among all health professionals who are in teleworking mode of the Machala General Hospital. The information will be collected by means of a Google Forms form, in which the questions corresponding to the sociodemographic and clinical variables have been implemented. The data will be automatically dumped into an EXCEL sheet, the data format is compatible with ASCII. A codebook will be developed to collect each variable with its corresponding labeling and operationalization. The data will not be used in further research. The data of each subject, in rows, will only possess a subject number identifier code, but in no case were recorded: names, surnames, ID card numbers or e-mails, therefore, the subjects cannot be identified.

Subsequently, the educational intervention will be conducted online through the (ZOOM) platform on the prevention of anxiety and depression in the studied population. This will have a duration of 40 minutes.

Statistical analysis

A descriptive analysis will be performed using percentages, frequencies, measures of central tendency, followed by a normality test using Shapiro Wilk (W). Parametric tests will be used for correlation analysis using Pearson's test. For the aforementioned statistical analyses, the statistical software InfoStat and SPSS-26 will be used.

The present investigation was conducted in accordance with the international ethical guidelines for health-related research involving human subjects, developed by the Council for International Organizations of Medical Sciences (CIOMS). The ethical justification for conducting this type of health-related research on human subjects lies in its social and scientific value, from the perspective of generating the knowledge and means necessary to protect and promote people's health.

The research planned by the researcher is validated under the Code of Ethics of Research on Human Beings of the University of UTE, truthful information, and with its due correction and authorship of the documents delivered, that is, the whole context of the present information is approved by the code: IMP-SIC-LLA-CUIO 1408 20.

Scientific knowledge, must be directed on a par with respect for the rights of the participants, in this sense, scientific research cannot exceed these fundamental limits, that is why, the confidentiality of the information provided by the participants will be guaranteed, in order to obtain truthful answers, that allow giving objective results of scientific application, since the informed consent constitutes an ethical and legal element of all research that must be

provided to the participants that accept and that comply with the established inclusion criteria.

III. RESULTS

In the following section, the results obtained through the application of the data collection instrument are presented; as a result of the theoretical and methodological work carried out in this research, these derivations will be presented in tables showing the results obtained with frequency and percentages, thus allowing the analysis of the results obtained after the statistical treatment, for which the statistical program info stat version updated in 2020 and SPSS V-26 were used.

In order to achieve this, the data obtained are arranged with the frequency and distribution of the rigorous analysis process, with the support of descriptive statistics, then the percentages in each of the items are identified and the meaning of these results is explained, then the results of the study are presented in the following tables corresponding to the Sociodemographic Variables of the study population, then the State-Trait Anxiety Inventory (STAI) will be analyzed, followed by the State-Trait Depression Inventory (IDER) to subsequently carry out the educational intervention.

Table 1

Age of health professionals General Hospital of the IESS in Machala City March 2021

Age	F	%
18-25	11	11.6
26-35	49	52.6
35-45	26	27.4
45 onwards	8	8.4
Total	95	100

When observing the table number 1 referred to the age of the health professionals of the general hospital of the Ecuadorian Institute of Social Security of the City of Machala it can be observed that 52.6% of the population is between 26 and 35 years of age, this allows to determine that the population is young adult, so it can develop more easily technological skills and abilities that allow them to carry out in a better way the telework but even so, it could have its repercussion in its psychological sphere being able to cause in this population anxiety and depression.

Table 2

Sex of health professionals General Hospital of the IESS in Machala City March 2021

Sex	F	%
Male	11	11.6
Female	84	88.4
Total	95	100

The table number 2 identified as text of health professionals can be seen that 88.4% of this population is female and only 11.6% belongs to the male sex, these results identify that most of the working population of the institution studied is female which in turn could be related to their psychological sphere at the time of developing teleworking and present some sign of anxiety and depression.

Table 3

Marital status of health professionals General Hospital of the IESS in Machala City

Marital status	F	%
Single	25	26.3
Married	50	52.6
Unmarried	27	28.4
Divorced	5	5.3
Widowed	2	2.1
Total	95	100

Table 3 shows that 52.6% of the health professionals are married, followed by 28.4% who live in a free union. These results can be related to a decrease in the risk of suffering from depression and anxiety, since there is psychological support provided by their romantic partner.

Table 4

Department to which the health professionals belong General Hospital of the IESS in the city of Machala

Department to which the health professionals belong General Hospital	F	%
Medical Department	16	16.8
Nursing Department	52	54.7
Nursing Assistants	24	25.3
Administrative Department	3	3.2
Total	95	100

When analyzing table 4, it is worth noting that 54.7% of the health professionals belong to the Nursing department and only 16.8% belong to the Medical department. 8% belong to the Medical department; that is to say, that the population that mostly performs telework within the institution are professionals of the Nursing, this may be due to the different roles of the profession that allow the realization of the work in a virtual and remote way being thus also synchronous and asynchronous, so it could be an advantage from the point of view of work for the nursing professional since it would be exposed to lower incidence of risk factors from the biological point of view, otherwise it happens with doctors who must assess from the physical, psychological and physiological users so he telework is contradictory to the medical practice.

Table 5
Anxiety-State (A-E) General Hospital of the IESS of Machala City

Items	N		A		B		M	
	F	%	F	%	F	%	F	%
I feel calm.	8	8.4	42	44.2	30	31.6	15	15.8
I feel confident.	7	7.4	30	31.6	41	43.2	17	17.9
I am tense.	17	17.9	44	46.3	27	28.4	7	7.4
I am upset.	26	27.4	38	40	24	25.3	7	7.4
I feel comfortable (I am at ease).	14	14.7	28	29.5	35	36.8	18	18.9
I feel upset.	35	36.8	35	36.8	20	22.1	4	4.2
I am worried now about possible future misfortunes.	12	12.6	35	36.8	28	29.5	20	21.1
I feel rested.	16	16.8	45	47.4	22	23.2	12	12.6
I feel distressed.	22	23.2	42	44.2	23	24.2	8	8.4
I feel comfortable.	10	10.5	38	40	37	38.9	10	10.5
I have confidence in myself.	10	10.5	20	21.1	30	31.6	35	36.8
I feel nervous.	23	24.2	41	43.2	27	28.4	4	4.2
I am uneasy.	33	34.7	39	41.1	19	20	4	4.2
I feel very "tied down" (like depressed).	34	35.8	37	38.9	19	20	5	5.3
I am relaxed.	16	16.8	34	35.8	29	30.5	16	16.8
I feel satisfied.	10	10.5	35	36.8	37	38.9	13	13.7
I am worried.	16	16.8	46	48.4	27	28.4	6	6.3
I feel dazed and overexcited.	33	34.7	37	38.9	23	24.2	2	2.1
I feel joyful.	10	10.5	32	33.7	33	34.7	20	21.1
At this moment I feel good.	12	12.6	26	27.4	33	34.7	24	25.3
Total	18	19	36	34	28	27	13	12

Table 5 which studies anxiety and state which is a Spanish adaptation of state-trait anxiety of the State-Trait Anxiety Inventory, where anxiety is studied as a transitory emotional condition state and anxiety as a relatively stable anxious trait or propensity can be observed that 34% of the study population has some degree of anxiety, as can be noted, this population to be subject to a relatively emerging mode of work, has developed as compensatory mechanisms from the psychological point of view the anxiety, which may be due to the ignorance of the realization of their work

activities from the tranquility of their home, so, has not been professionally trained for the realization of teleworking, but, that their functions as health professionals are oriented to the assessment, diagnosis, treatment and resolution of the problems of the patient insitus; i.e., intrahospital, so that, teleworking may constitute a threat from the psychological point of view for health workers since the exercise of teleworking could be subjected to high psychological risk factors that could alter their state of health.

Table 6
Anxiety-Range (A-R) General Hospital of the IESS of Machala City

Items	N		A		B		M	
	F	%	F	%	F	%	F	%
I feel calm.	16	16.8	33	34.7	28	29.5	18	18.9
I get tired quickly.	22	23.2	40	42.1	25	26.3	8	8.4
I feel like crying.	25	26.3	36	37.9	22	23.2	12	12.6
I would like to be happy like others.	30	31.6	24	25.3	21	21.1	21	22.1
I miss opportunities by not deciding soon.	35	36.8	35	36.8	16	16.8	9	9.5
I feel rested.	13	13.7	39	41.1	29	30.5	14	14.7
I am a calm and serene person.	9	9.5	31	32.6	33	34.7	9	9.5
I see difficulties piling up and I can't cope with them.	34	35.8	40	42.1	16	16.8	5	5.3
I worry too much about unimportant things.	28	29.5	41	43.2	18	18.9	8	8.4
I am happy.	9	9.5	30	31.6	28	29.5	28	29.5
I tend to take things too seriously.	7	7.4	35	36.8	21	21.1	7	7.4
I lack self-confidence.	39	41.1	31	32.6	16	16.8	9	9.5
I feel secure.	10	10.5	27	28.4	32	33.7	26	27.4
I tend not to face crises or difficulties.	21	22.1	43	45.3	23	24.2	8	8.4
I feel sad (melancholic).	25	26.3	43	45.3	18	18.9	9	9.5

I am complacent.	9	9.5	31	32.6	34	35.8	21	22.1
I am haunted and bothered by unimportant thoughts.	23	24.2	47	49.5	16	16.8	9	9.5
I am so affected by disappointments that I cannot forget them.	30	30.5	33	34.7	21	22.1	12	12.6
I am a stable person.	6	6.3	29	30.5	35	36.8	25	26.3
When I think about current affairs and worries I become tense and agitated.	17	17.9	39	41.1	28	29.5	11	11.6
Total	20	19	35	33.2	24	22.8	16	15.2

In the table number 6 It can be seen that the analysis on the anxiety Rank the health personnel working in the general hospital of the Ecuadorian Institute of Social Security of the City of Machala what 33. 2% of the surveyed population was identified some trait of anxiety during the realization of teleworking, these results, are discouraging since there is difficulty workers to perform this modality of virtual work, this attitude that may prove to be negative may be due to lack of training in health professionals, because although it is true, at present there is the semi face-to-face or distance education health professionals have been trained

within health institutions, attending in a direct way the health needs of the users, now well, these observed results can put at risk the health of the population that is performing telework, from the psychological point of view but in turn there is the risk benefit because in time of pandemic the Social confinement is one of the measures of prevention dictated by the World Health Organization but the health professional could receive the training of online form which would contribute to reduce their levels of anxiety and minimize the risk of depression.

Table 7 Depression-State (D-E) General Hospital of the IESS of Machala City

Items	N		A		B		M	
	F	%	F	%	F	%	F	%
I am encouraged.	14	15.8	31	32.6	28	29.5	21	22.1
I am happy.	10	10.5	36	37.9	25	26.3	24	25.3
I am enthusiastic.	13	13.7	32	33.7	31	32.6	19	20
I feel energetic.	18	18.9	25	26.3	32	33.7	20	21.1
I feel good.	16	16.8	26	27.4	30	31.6	23	24.2
I feel down.	43	45.3	32	33.7	11	11.6	9	9.5
I am sad.	46	48.4	27	28.4	16	16.8	6	6.3
I am sad.	43	45.3	26	27.4	16	16.8	10	10.5
I feel unhappy.	56	58.9	21	22.1	13	13.7	5	5.3
I feel energetic.	17	17.9	33	34.7	28	29.5	17	17.9
Total	28	26.6	29	27.5	23	21.8	15	14.2

Table 7 described as depression state of health professionals surveyed can be evidenced that 27.5% of these professionals have some degree of depression or alteration of their emotional state, as they feel depressed, sad, sorry

and unhappy; these feelings and emotions may be due to frustration at having to perform telework without having previously received adequate training that would allow them to develop their functions remotely.

Table 8 Depression - Range (D-R) IESS General Hospital of the City of Machala

Items	N		A		B		M	
	F	%	F	%	F	%	F	%
I feel happy	18	18.9	23	24.2	30	31.6	24	25.3
I enjoy life.	11	11.6	27	28.4	30	31.6	11	11.6
I feel energetic.	18	18.9	33	34.7	27	28.4	17	17.9
I am sad.	43	45.3	32	33.7	11	11.6	9	9.5
I feel full.	13	13.7	30	31.6	31	32.6	21	22.1
I have no desire for anything.	40	44.2	34	35.8	11	11.6	8	8.4
I am down.	44	46.3	29	30.5	12	12.5	10	10.6
I am down.	56	58.9	27	28.4	7	7.4	5	5.3
I am hopeful about the future.	13	13.7	22	23.2	23	24.2	37	38.9
I feel unhappy.	55	57.9	29	30.5	7	7.4	4	4.2
Total	31	29.5	29	27.5	16	15.2	19	18

Table 8, referring to the Depression Rank of the health professionals surveyed, shows that 29.5% have not identified any Depression Rank, but still have mixed feelings and emotions. 5% is not identified any range of depression but still maintains feelings and emotions found, because, feels sad, does not feel like anything, is depressed and believes to be sunk between the difficulties, these results, allow to describe that teleworking can be a psychological risk factor in health workers as they are not trained in the cognitive and attitudinal procedural skills to develop their work virtually since health professionals attend directly and holistically to users or patients in different areas of health.

IV. DISCUSSION

On the basis of the results obtained, it is identified that the population that mostly performs telework within the institution are professionals of Nursing, because their care, administrative, research and teaching functions can be performed under virtualization but having previously a training, taking into account the availability of technological equipment and internet connectivity, since the lack of these can generate anxiety in professionals, for not having how to do their work.

Consequently, when applying scale of anxiety and state which is a Spanish adaptation of anxiety state-trait of the State-Trait Anxiety Inventory 34% of the population in study has some degree of anxiety, in 33.2% some trait of anxiety was identified during the accomplishment of the telework, in 29.5% is not identified any range of depression but still maintains feelings and emotions found, and 27.5% of these professionals have some degree of depression or alteration of their emotional state.

V. CONCLUSIONS

After carrying out the investigation anxiety and depression in health professionals with dedication to telework of the General Hospital of the IESS of the City of Machala with the objective of determining the level of anxiety and depression in health professionals with dedication to telework which involved a quantitative process to respond to the objectives and after the statistical analysis that contributes to a greater understanding of the findings obtained, we proceed to provide the following conclusions:

When characterizing socio demographically to the study population it is concluded that 52.6% of the population is between 26 and 35 years of age, 88.4% of this population is female, 52.6% of the professionals are married, 54.7% of the health professional belongs to the department of Nursing.

When relating the anxiety and depression to the sociodemographic variables of the health professionals with dedication to telework of the General Hospital of the IESS of the City of Machala, it is concluded that the anxiety is presented in some degree in 33.6 % and the psychological depression in 27.5 % of the population mostly feminine

reason why it is the greater labor force of the institution in study.

When carrying out an educational intervention for the prevention of anxiety and depression in the population studied, it was concluded that the impact of this intervention was positive in the population.

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