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University Anxiety, Depression and Stress in Pandemic Times

Abstract

*Fear and uncertainty, related to emergency health measures such as confinement by Covid-19, has generated anxiety, depression and stress. In this context, the objective of this work has been to establish the correlation between the three variables. The type of study was carried out under a quantitative approach, basic type, descriptive level, with a non-experimental cross-sectional-correlational design. The DASS-21 scale (Lovibond and Lovibond, 1995) was used to measure the variables indicated. The sample comprised a total of 440 students of Human Medicine from the first to the fifth cycle; it was composed of 173 females (39.3%) and 267 males (60.7%). The selection was made under non-probabilistic convenience sampling. The descriptive statistical findings revealed the difference in the students: males presented higher levels in the variables measured: anxiety in 58.2%; depression, 56.4% and stress, 34.8%. In the hypothesis test, the correlation between the anxiety variable and the depression variable obtained a result of Spearman's Rho = 0.804**, which is interpreted as a high positive relationship between the variables. As for the correlation between the anxiety variable and the stress variable, a Spearman's Rho = 0.893 was obtained, which is interpreted as high correlation between the variables.*

Keywords: Anxiety, Depression, Stress, Pandemic, COVID-19.

Introduction

The pandemic we are going through was announced by the Wuhan Municipal Health Commission on December 12, 2019 in China. The virus that triggered this situation was named by the World Health Organization (WHO) as coronavirus or also by its scientific name SARS-CoV-2 (Apaz et al., 2020). All this led the WHO to set up an Emergency Committee, which was an important milestone, since this respiratory disease was declared a worldwide threat due to the high cases of contagion found in the Asian country, as well as in several neighboring countries and later in Peru (Huarcaya, 2020).

Much has been mentioned about how it is causing anxiety and depression to people around the world; however, it should not be a new phenomenon, since over time they have been the most recurrent diseases we suffer from. People with anxiety are more susceptible to interpret harmless bodily sensations as evidence that they are infected, causing maladaptive behaviors such as going to health centers, buying masks in excess, gloves, disinfectants, etc. Likewise, they

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may harm themselves by believing that they cannot be infected (Asmundson, 2020).

On the other hand, depression has been seen to increase in both men and women, presenting mild, moderate and severe depressive symptoms; also in people, who suffer from the death of family members or a loved one, generating feelings of sadness and resentment leading to a possible pathological grief (Wang, 2020). Fear and uncertainty, related to emergency health measures such as confinement by Covid-19, have generated anxiety, depression and stress. For this reason, the objective of this paper will be to analyze and explain how the pandemic and the restrictive measures have become the main cause of the mental and emotional health of people affected.

In relation to the literature, there are few studies that relate the three variables anxiety, depression and university stress in medical students in times of pandemic. For this reason, this research work conceives an enormous transcendence in the bibliographic reviews, looking for the continuation and production of future complementary researches that allow obtaining a much broader vision of this great health problem. According to Hernández (2020), the SARS-CoV-2 pandemic is testing the physical and psychological capacities of the entire population. Faced with the crisis of confinement that is being experienced due to COVID-19, infected young people, adults and elderly people and families who have received the news of a family member with this disease, come to feel anxious, nervous, experience anger and sadness in the face of this extreme situation that we live in today. The confinement and control measures are causing hundreds of families to feel fear, which can lead to social stigmatization of the patients and their families, all with psychological consequences.

Anxiety and depression are disorders whose diagnoses are recurrent in the population worldwide, affecting in a stealthy way the mental integrity of each individual. Emphasizing the current situation, all people subjected to this confinement may or may not suffer from some kind of psychic disorder, in some cases even having clinical pictures of stress. On the other hand, anguish, either due to the fear of contracting this disease or to the loss of a family member, leads the person to develop an anxiety disorder. Likewise, there is a notable deterioration in the interactive or occupational functioning of the individual, in such a way that, if it lasts over time, it can affect the mood, resulting in melancholy, which can lead to a major depressive disorder (Ramirez et al., 2020).

During the pandemic, there has been a high number of losses, adding to the high rate of people infected, which gives a picture in which people do not carry an adequate stage of mourning. On the other hand, people, who feel stressed, show a lot of distress and a significant deterioration in occupational and social functioning, forming a stressful change or emotional reaction that is not a healthy response. This may be followed by a persistent sadness of mood presenting major depressive disorder (Ramirez et al., 2020).

The decision that has generated the greatest amount of mental damage at present is the stress generated by psychosocial problems, with COVID-19 infections being part of them. In view of this situation, contingency plans were generated, establishing measures of social restriction and confinement as an action to counteract the increase in the number of infections. However, in turn, this mandatory social isolation has caused serious problems in people, such as continuous or chronic stress (Hernández, 2020). Regarding the mandatory quarantine, in order to face COVID-19, the government has the role of providing accurate information about care and contingency plans in a strategic way to try to maintain hope and "calm" in this complicated situation (Marquina and Jaramillo, 2020). From this, the importance of psychological support given in different ways is important to face the psychological damages that are consequences adjacent to this whole process.

It is necessary to refute, based on previous research, the relationship between the consequences generated by COVID-19 disease. It was found that young people who work or study in the virtual modality presented a higher level of anxiety than people who work face-to-face. Although the differences were minor, these justify the uncertainty regarding the interaction of the environment and its evaluation in the management of the attention that it will present (Prieto, 2020). Likewise, we must take into account that COVID-19 disease maintains a constant confrontation with health workers, being them those who predispose a higher indicator regarding the level of stress, deriving in a possible anxiety.

Another case presented in the health area is that of pregnant mothers, since we can clearly state that, being women and pregnant, they present a greater interaction in terms of the factors that preside over stress. This hormonal movement, added to the negative thought of health centers, reports that expectant mothers have a greater fear of contagion, both for their relatives, themselves and their babies. In addition, compared to men, they are more vulnerable to suffer some mental health condition, since they present a determining factor in their biological and social aspects (Muñoz et al., 2020).

We cannot deny that there is a link between pandemics and increased levels of anxiety. One of the most recent cases was severe acute respiratory syndrome which, as the condition of

physical health and psychological well-being progresses, causes disruptions in interpersonal relationships, changing the person's perception of possible contagion. In other words, even when there is a regulation to reduce the risk, a person has a greater predisposition to contract anxiety, whether mild or moderate (Vázquez, 2020). Common symptoms in a person with anxiety are intense worry or apprehension, restlessness, fatigue, difficulty concentrating, irritability, muscle tension, sleep disturbances, and general physical discomfort (DSM-VI, 2014). A person with anxiety may misinterpret muscle aches with some symptom of infection, as well as maladaptive behaviors, being, particularly, compulsive hand washing, social withdrawal, impulsive shopping, among others. In turn, people who do not present these behaviors will have an apathetic behavior in terms of following the recommendations, contributing a negative impact on virus mitigation efforts (Vázquez, 2020).

Occurrence of Anxiety, Depression and Stress as a Consequence of Covid-19

Anxiety

Defined as a set of unpleasant emotions, linked to negative thoughts; where the subject will cognitively evaluate the situation and its perception commonly in a threatening way, imposing an emotional reaction on their security, self-esteem and personal stability (Contreras et al., 2005). Since the emotions they present are stimulated by an over activation of the nervous system as a receiver of the spontaneous problems that preside over it, they will derive in discomfort, discomfort, alarm and tension, being the most generalized in an external way.

However, inside, a set of combinations is formed regarding the activation of the sympathetic system, the secretions of hormones from the adrenal glands, which form a crucial factor in the management of anxiety, giving cognitive, physiological, motor and emotional responses (Diaz et al., 2013).

This visualization associated with fear is consequent to the perception of threatening stimuli, being notorious the direct relationship with the increase due to the impact formed by the pandemic, either in various aspects such as quality of life, health, welfare and development of the individual. This causes dissociation from reality when facing stressful and/or fearful situations (Rodriguez et al., 2020). About this, Gennaro et al. (2020) infer that coronavirus can bring psychopathological sequelae, either directly through the central nervous system through a viral infection, or indirectly through an immune response; these cells are potential neurotrophs to induce neuronal lesions causing psychiatric symptoms precipitating neuroinflammation (Gennaro et al., 2020).

Symptomatology

Commonly, generalized anxiety is presented, being this at a higher level, and where the subject persists with symptoms, mostly of unspecified somatic index, such as insomnia, inability to fall asleep; headaches, tensions that cause pain or discomfort in the head; muscle aches, moderate tensions in various areas of the body; fatigue and symptoms of gastrointestinal discomfort, pains linked in the abdomen, associated with depositional alterations (generalized anxiety disorder, 2013). Likewise, it can generate other adjacent pathological alterations, such as hypoglycemia, cardiomyopathy, depression, being these, mainly, linked to the moment of presenting generalized anxiety, among others.

Causal Factors

In the pandemic, it was observed that most of the young students of higher education present a higher level of anxiety, depression and stress. Likewise, through research, there is an association between academic level and the level of anxiety and depression (Salari et al., 2020).

But, what is the origin in the integration of anxiety, it is commonly linked to the weakness or inability in terms of personality, represented by a social stigma to the reaction presented by a stressful situation (Muñoz et al., 2020); however, we must consider that anxiety is a necessary capacity in the daily life of the human being, being this vital process in the survival and change of the human being, clearly, in a measured way. Since, a few years ago, it was postulated that the cognitive process maintains four processes in relation to anxiety, being these: intolerance to uncertainty, as a premise is the initial confrontation of the subject with the stressful stimulus; second the tendency to overestimate the usefulness of the concern, where in which case, the subject part to a misconception of the event that presents, increases its negative perception avoiding a confrontation; third, ineffective orientation to problems, continued to the second step, does not generate an efficient solution to confront the situation; and finally, cognitive avoidance (Moreno, 2020).

Therefore, in addition to the previous characteristics presented, if we relate it to the current situation, we can conclude that, when the situation of the pandemic occurred in an impertinent and spontaneous way, it generated a negative vision and response regarding the interpretation of the reception of it, where it will depend on the way of thinking, beliefs, ideologies,

traits and experiences to take it in different ways; however, it is clear that most people will not take it in the best way, generating an accelerated anxiety regarding the distorted thoughts that it presents.

Depression

As for the terminological definition of depression, it is understood as the consistency in the decrease of mood with a certain variable degree of loss of interest, as well as the presence of a greater difficulty to appreciate and experience pleasure in habitual activities. In addition, like anxiety, it is linked to difficulty in concentration, with the difference that depression is not considered purely in the face of instinctive vicissitudes; but also in the body's own weakness, the inferiority of the self and helplessness, generating negative emotions of sadness and physical symptoms such as decreased libido, anorexia, hyperflagia, among others (Diaz et al., 2013).

On the other hand, in milder levels, it can occur as a transitory emotional state, making the person prone to suffer depressive states even though his or her personality is relatively stable. Depression affects in a prolonged manner the individual's basic capacity to perform activities, deteriorating his or her functioning. This, unlike the previous one, is much more complex and comprehensive, since the factors are completely different; starting from the perspective and self-esteem, as well as the economic part that can be presented (Arias et al., 2020).

Being then, the most common symptoms, initially, the lack of sleep, the regulation of emotions, playing a fundamental role in the consequent functioning of emotions, likewise, being exposed to direct consequences, we can form a pessimistic thinking in relation to life, causing an episode of depression. One of the clear examples was the situation in Taiwan in the previous pandemic, where, based on surveys, their outlook and life expectancy dropped by 10% (Ramirez et al., 2020).

It is necessary to emphasize that, being mostly associated with a mental disorder characterized mainly by a deep sadness, there is a wide range of symptoms preceding it, emotional, cognitive and physical, all of them affecting behavior; which, in addition to lack of sleep, are commonly fatigue, indiscriminate crying, irritability, social withdrawal, feelings of helplessness, loss of confidence and worthlessness, where, even to a greater degree, they may even have suicidal ideation such as attempts at self-harm or suicide itself (Pérez et al., 2017).

Stress Versus Covid-19 in University Students

According to Usher et al. (2020), cited in Valero et al. (2020), the current situation caused by the virus can cause stress in the population, which generates anxiety and fear due to the fear of being infected by this virus and suffering its lethal consequences. This constant concern causes children, young people and adults to be more prone to experience strong emotions. The measures taken by the State, such as compulsory social isolation, have caused a large part of the population to feel lonelier, since many of these people are not used to being locked up at home for so long, increasing stress and anxiety.

The Ministry of Health in Peru (Minsa, 2020), as a result of the current situation that the country is going through, proceeded to make a technical guide indicating that all entities belonging to public and private Health Care Providers [IPRESS], will plan and develop strategies to deal with the pandemic caused by COVID-19. This guide identifies different disorders that stand out more frequently, such as, for example, stress. In addition, two types of stress are mentioned, namely acute stress and post-traumatic stress.

Acute stress is a temporary disorder of significant severity that occurs in people who have no other mental illness to cope with exceptional physical or psychological stress such as COVID-19. It affects personal vulnerability and adaptability. Symptoms are variable and may include vegetative symptoms, insensitivity, narrowing of consciousness, etc. (Minsa, 2020). Consequently, post-traumatic stress, according to MINSA (2020), is a disorder that emerges as a delayed or delayed response to a stressful event or situation of a threatening or catastrophic nature; for example, the experience of virus infection. It manifests itself through repeated episodes of trauma, emotional disturbance, avoidance of activities and situations that evoked trauma, the state of vegetal hyperactivity, anxiety and depressive symptoms.

During this time, when families are isolated in their homes, they can see two forms of reactions of the population: on the one hand, some may take the best of themselves, and another may present stress, overwhelm and other mental illnesses (Marquina and Jaramillo, 2020). UNICEF together with the Peruvian Ministry of Health (2020) describe that it is important to actively listen and teach positive coping techniques in the face of family stress that may have increased due to the fear of infection by the virus.

Materials and Method

Methodology

The type of research is basic or theoretical because of the search for new knowledge without immediate practicality, and descriptive level because it details how a certain phenomenon is found and its characteristics at a certain time (Sánchez et al., 2018).

The study design is non-experimental, cross-sectional and correlational. It is non-experimental, because variables are not intentionally modified, variables are analyzed in existing situations; it is cross-sectional, because data are collected and analyzed in a single lapse; and it is correlational, since it establishes relationship or association between two variables in a certain context (Hernández-Sampieri and Mendoza, 2018).

Instrument

The instrument was the questionnaire, considered as a tool used for the measurement of the variables of the phenomenon to be investigated (Sánchez et al., 2018). For the purpose of the research, the Depression, Anxiety and Stress Scale DASS-21 (Lovibond and Lovibond, 1995) was used. These variables are part of a single questionnaire, which includes seven items per scale. The respondent is presented with a series of possible situations of emotional distress and is asked to indicate how often he/she experienced each of them during the last week. The instrument provides four response options in Likert format, ordered from 0 (does not describe anything that happened to me or I felt during the week) to 3 (Yes, this happened to me a lot, or almost always).

Participants

A sample of 440 students from the first to the fifth cycle of the Faculty of Human Medicine of a public university in Lima, whose ages ranged from 189 students under or equal to 22 (43%), 185 students aged 23 to 24 (42%) and 66 students over 25 (15%). In terms of sex, the sample was composed of 173 females (39.3%) and 267 males (60.7%).

Procedure

The evaluation was carried out through the participants' WhatsApp, using a Google form, prior agreement with the classroom teacher and previous explanation to the participants about the nature of the study through the Zoom platform. In all cases, participation was voluntary and the possibility of not answering the questionnaire was made clear. Participants gave their consent orally. Data confidentiality was indicated.

Data Analysis

Initially, the descriptive results were analyzed using Excel. Initially, the descriptive results were analyzed using Excel. Then, the inferential part through the Rho Spearman for hypothesis testing on the correlation of the variables due to their qualitative nature.

Results

Descriptive statistics were analyzed.

Table 1.

Levels of the anxiety variable according to age

		Anxiety					Total
		Normal	Medium	Moderate	Severe	Extremely severe	
Age	Minor or same to 22	21	10	43	22	93	189
		4,8%	2,3%	9,8%	5,0%	21,1%	43,0%
	From 23-24	3	1	2	1	178	185
		0,7%	0,2%	0,5%	0,2%	40,5%	42,0%
	Greater than 25	8	5	4	5	44	66
		1,8%	1,1%	0,9%	1,1%	10,0%	15,0%
Total		32	16	49	28	315	440
		7,3%	3,6%	11,1%	6,4%	71,6%	100,0%

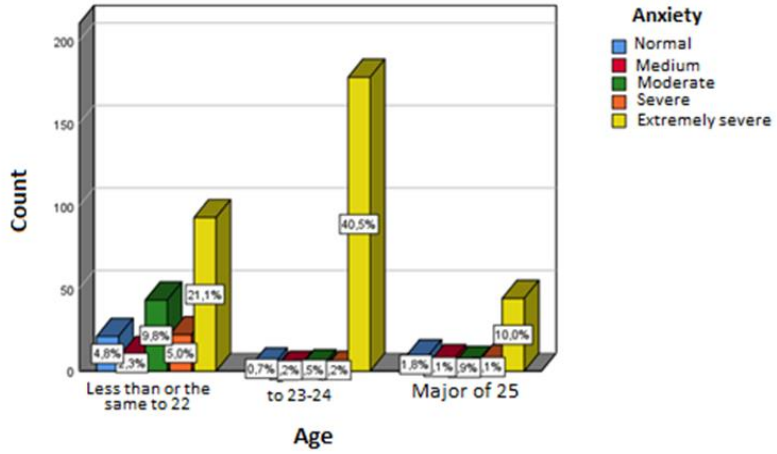

Figure 1.

Levels of the anxiety variable according to age

In Table 1 and Figure 1, of the students younger than or equal to 22 years of age, 4.8% presented a normal level; 2.3%, a medium level; 9.8%, a moderate level; 5% presented a severe level; and 21.1%, an extremely severe level. From 23 to 24 years of age, 0.7% presented a normal level; 0.2%, a medium level; 0.5%, a moderate level; 0.2%, a severe level and 40.5%, an extremely severe level and those over 25 years of age, 1.8% presented a normal level; 1.1%, a medium level; 0.9%, a moderate level; 1.1%, a severe level and 10%, an extremely severe level.

Table 2.

Levels of depression according to age

		Depression					Total
		Normal	Medium	Moderate	Severe	Extremely severe	
Age	Minor or same to 22	12	8	33	47	89	189
		2,7%	1,8%	7,5%	10,7%	20,2%	43,0%
	From 23-24	2	0	2	6	175	185
		0,5%	0,0%	0,5%	1,4%	39,8%	42,0%
	Mayor of 25	11	0	4	7	44	66
		2,5%	0,0%	0,9%	1,6%	10,0%	15,0%
Total		25	8	39	60	308	440
		5,7%	1,8%	8,9%	13,6%	70,0%	100,0%

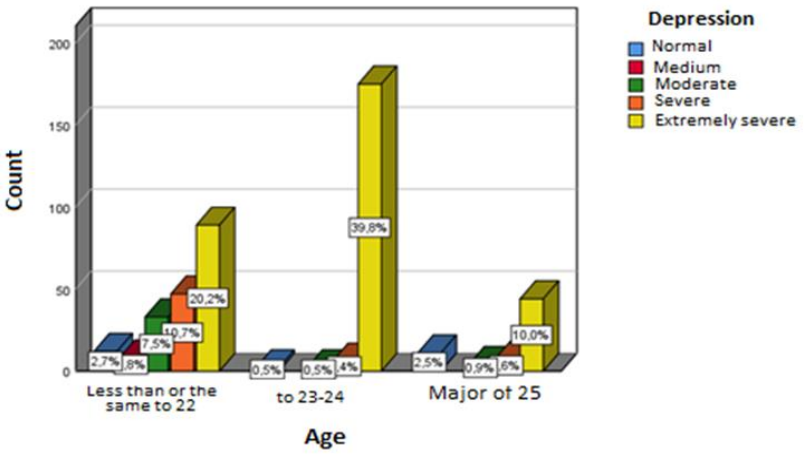

Figure 2.

Levels of depression according to age

In Table 2 and Figure 2, of the students under or equal to 22 years of age, 2.7% presented a normal level; 1.8%, a medium level; 7.5% presented a moderate level; 10.7%, a severe level; and 20.2%, an extremely severe level. From 23 to 24 years of age, 0.5% presented a normal level; 0.5%, a moderate level; 1.4%, a severe level and 39.8%, an extremely severe level and, of those over 25 years of age, 2.5% presented a normal level; 0.9%, a moderate level; 1.6%, a severe level and 10% presented an extremely severe level.

Table 3.

Levels of the stress variable according to age

		Stress					Total
		Normal	Medium	Moderate	Severe	Extremely severe	
Age	Minor or same to 22	78	21	10	34	46	189
		17,7%	4,8%	2,3%	7,7%	10,5%	43,0%
	From 23-24	4	3	4	64	110	185
		0,9%	0,7%	0,9%	14,5%	25,0%	42,0%
	Mayor of 25	19	2	4	19	22	66
		4,3%	0,5%	0,9%	4,3%	5,0%	15,0%
Total		101	26	18	117	178	440
		23,0%	5,9%	4,1%	26,6%	40,5%	100,0%

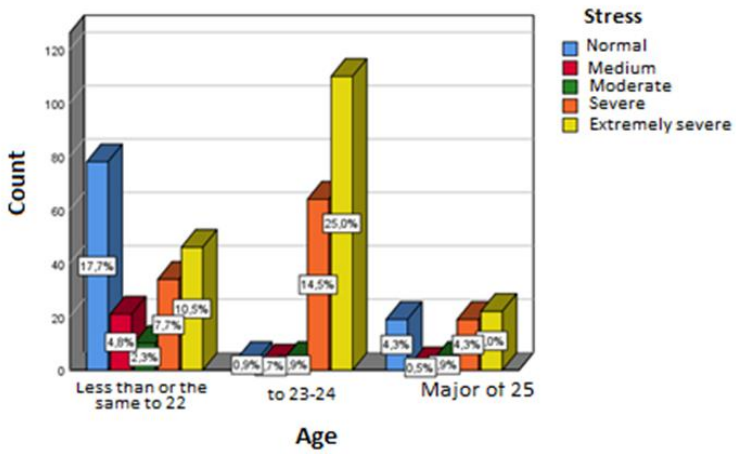

Figure 3.

Levels of the stress variable according to age

In Table 3 and Figure 3, of the students under 22 years of age, 17.7% presented a normal level; 4.8%, a medium level; 2.3% presented a moderate level; 7.7%, a severe level; and 10.5%, an extremely severe level. From 23 to 24 years of age, 0.9% presented a normal level; 0.7% presented a medium level; 0.9%, a moderate level; 14.5% presented a severe level and 25%, an extremely severe level and, of those over 25 years of age, 4.3% presented a normal level; 0.5%, a medium level; 0.9%, a moderate level; 4.3% presented a severe level and 5%, an extremely severe level.

Table 4.

Levels of the anxiety variable according to sex

			Anxiety					Total
			Normal	Medium	Moderate	Severe	Extremely severe	
Sex	Female		29	12	47	26	59	173
			6,6%	2,7%	10,7%	5,9%	13,4%	39,3%
	Male		3	4	2	2	256	267
			0,7%	0,9%	0,5%	0,5%	58,2%	60,7%
Total			32	16	49	28	315	440
			7,3%	3,6%	11,1%	6,4%	71,6%	100,0%

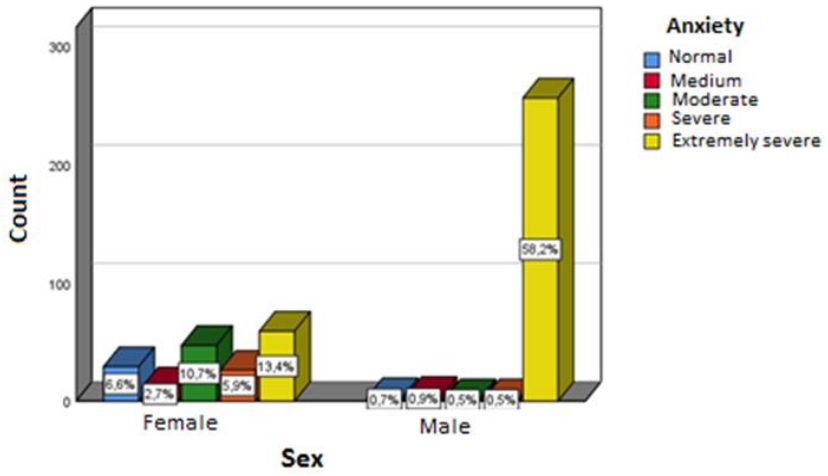

Figure 4.

Levels of the anxiety variable according to sex

In Table 4 and Figure 4, of the female students, 6.6% presented a normal level of anxiety; 2.7%, a medium level; 10.7%, a moderate level; 5.9%, a severe level; and 13.4%, an extremely severe level. As for the male sex, 0.7% presented a normal level of anxiety; 0.9%, a medium level; 0.5%, a moderate level; 0.5%, a severe level; and 58.2%, an extremely severe level.

Table 5.

Levels of the variable depression according to sex

			Depression					Total
			Normal	Medium	Moderate	Severe	Extremely severe	
Sex	Female		19	8	37	49	60	173
			4,3%	1,8%	8,4%	11,1%	13,6%	39,3%
	Male		6	0	2	11	248	267
			1,4%	0,0%	0,5%	2,5%	56,4%	60,7%
Total			25	8	39	60	308	440
			5,7%	1,8%	8,9%	13,6%	70,0%	100,0%

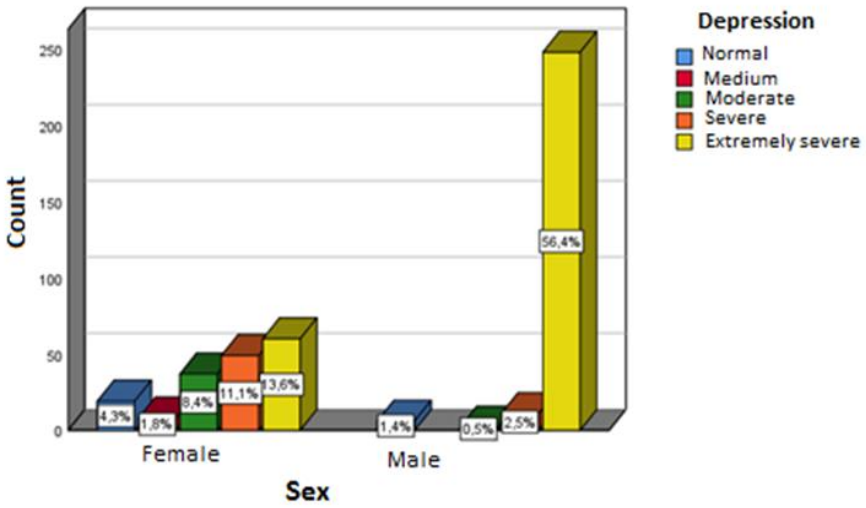

Figure 5.

Levels of depression variable by sex

In Table 5 and Figure 5, of the female students, 4.3% presented normal level of depression; 1.8%, medium level; 8.4%, moderate level; 11.1%, severe level; and 13.6%, extremely severe level. As for the male sex, 1.4% presented a normal level of depression; 0.5%, a moderate level; 2.5%, a severe level; and 56.4%, an extremely severe level.

Table 6.

Stress levels by gender

			Stress					Total
			Normal	Medium	Moderate	Severe	Extremely severe	
Sex	Female	Count % of total	92	22	9	25	25	173
		% of total	20,9%	5,0%	2,0%	5,7%	5,7%	39,3%
	Male	Count % of total	9	4	9	92	153	267
		% of total	2,0%	0,9%	2,0%	20,9%	34,8%	60,7%
Total		Count % of total	101	26	18	117	178	440
		% of total	23,0%	5,9%	4,1%	26,6%	40,5%	100,0%

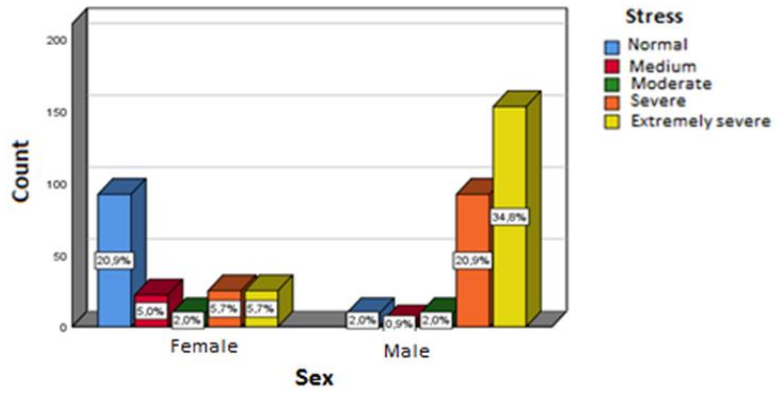

Figure 6.

Levels of stress variable by sex

In Table 6 and Figure 6, of the female students, 20.9% presented normal level of stress; 5%, medium level; 2%, moderate level; 5.7%, severe level; and 5.7%, extremely severe level. As for the male students, 2% presented normal level of anxiety; 0.9%, medium level; 2%, moderate level; 20.9%, severe level; and 34.8%, extremely severe level.

Table 7.

Correlation between the variables, anxiety, depression and stress of students

Correlations					
			Anxiety	Depression	Stress
Spearman's Rho	Anxiety	Correlation coefficient Sig. (bilateral) N	1,000	,804**	,893**
		Sig. (bilateral)	.	,000	,000
		N	440	440	440
	Depression	Correlation coefficient Sig. (bilateral) N	,804**	1,000	,887**
		Sig. (bilateral)	,000	.	,000
		N	440	440	440
	Stress	Correlation coefficient Sig. (bilateral) N	,893**	,887**	1,000
		Sig. (bilateral)	,000	,000	.
		N	440	440	440
**. Correlation is significant at the 0.01 level (bilateral).					

Table 7 presents the results to test the hypothesis. The nonparametric Spearman's Rho test was performed. The correlation of the anxiety variable and depression obtained a result of Spearman's Rho = 0.804** which is interpreted as a high positive relationship between the variables; as for the correlation of the anxiety variable and the stress variable, a Spearman's Rho = 0. 893, which is interpreted as a high relationship and, correlation between the depression and stress variable, a Spearman's Rho = 0.887 was obtained and, in all cases, a $\rho = 0.000$ ($\rho < 0.05$) was obtained, so the null hypothesis is rejected.

Discussion

Depression is significantly related to stress in the study. Santos et al., (2017), in a study conducted in medical students, found a high percentage of students with stress as a risk factor for having depression; however, the relationship with depression was not statistically significant. Barraza et al. (2017) found that there was an inverse relationship between stress and depression. In the study conducted, it was concluded that a high percentage of students presented severe stress as a result of the pandemic.

6.6% of female students showed normal level of anxiety; 2.7%, medium level; 10.7%, moderate level; 5.9%, severe level; and 13.4% presented extremely severe level. As for the male sex, 0.7% presented normal level of anxiety; 0.9%, medium level; 0.5%, moderate level; 0.5%, severe level; and 58.2%, extremely severe level. In this regard, in the study by Arias et al. (2020), it was observed that, of a selected sample, the students maintained an intermediate and high state, generating 12.20% of the total average intensity of depression. Likewise, Trunce et al. (2020) concluded that, in Health students, there is a higher prevalence of intermediate level of anxiety, stress and depression. According to Prieto et al. (2020), depression and anxiety of students in times of pandemic is due to the feeling of loneliness and family demands, in which cases, being a situation that deprives them in terms of social interactions, it can be argued that there will be a higher rate of negative thoughts, indicating a greater remarcation in the symptoms of depression, all this reinforced with the continuous demands that they will present with their families to follow a rigorous health control and the fear of possible infection of a family member. On the other hand, in depression, an increase has been seen in both men and women, presenting mild, moderate and severe depressive symptoms. Also in people who suffer from the death of family members or a loved one, generating feelings of sadness and resentment, which can lead to a possible pathological grief (Wang, 2020).

Regarding the results of anxiety, it was observed that, in university students, 7.3% presented normal level anxiety; 3.6%, medium level; 11.1%, moderate level; 6.4%, severe level and 71.6%, extremely severe level. Schlatter (2003) mentions that anxiety is a subjective sensation that occurs in situations that we consider as risk or threat, such situation makes the brain attentive, which is in charge of promoting responses. And for Hernandez et al. (2005), anxiety is a common occurrence in people that arises in the face of demanding responses or threats in order to seek adaptation. It can be evidenced as nervousness or restlessness, and if it becomes frequent, intense, autonomous, it generates withdrawal behaviors, included in mental disorders. In another research, Martínez et al. (2020) mention that social confinement has profoundly affected mental health. In their study conducted in Venezuela to 150 health workers in the State of Merid, applying the DASS - 21 Scale, resulted in 34, 6% showing signs of depression in its different levels, as 42, 7% care for patients with COVID-19.

Of the total number of medical students, 5.7% showed normal level depression; 1.8%, medium level; 8.9%, moderate level; 13.6%, severe level and 70%, extremely severe level. According to the World Health Organization (2017), depression is a mental disorder characterized by losing interest or pleasure in daily activities, experiencing a feeling of guilt and sadness, remaining exhausted all day, presenting difficulty concentrating, and generally low self-esteem. This disorder may be mild and can be treated without medication. However, it can become chronic, since, if it is moderate or severe, the use of drugs becomes necessary. In turn, according to Rojas (2006), depression can be classified as a group of psychic illnesses, both hereditary and acquired, which also have a specific symptomatology that generally shows changes in the somatic, psychological, behavioral, cognitive and assertive aspects.

Of the total number of medical students, 23% presented normal level stress; 5.9%, medium level; 4.1%, moderate level; 26.6%, severe level and 40.5%, extremely severe level. In this regard, Ramirez et al. (2020) stated that people who feel stressed show a lot of distress and a significant deterioration in occupational and social functioning, forming a stressful change or emotional reaction that is not a healthy response. Faced with this event, there may be a persistent sadness of mood presenting major depressive disorder.

Conclusions

From the statistical data on the impact of the pandemic on infected persons and their families,

it was observed that university students were the most affected, expressing fear, loneliness, anguish and deep sadness due to thoughts of their own death, feeling alone in a hospital far from their families, and feelings of abandonment. It is reaffirmed that psychological support is necessary for these patients. Emotional support helps to alleviate human suffering, where physical ailments lead to affect the mind. From the experience of this pandemic, it is evident how important it is to provide primary psychological care within hospitals to help all patients to cope with the thoughts of hopelessness typical of the condition in which they find themselves.

Likewise, it was seen that the anxiety generated by the perception of threatening stimuli has increased in the context of the pandemic, especially in view of the fact that the virtual modality in the academic and labor field increased the levels of this in the agents of these same fields, since the interaction of the environment and its evaluation in the management of the attention of the students or the employee/client has changed dramatically. This implies a greater predisposition to stress indicators, especially in teachers and employers, since they had to leave their comfort zone and be trained for a modality for which they were not prepared. The consequences are restlessness, irritability, intense apprehension, fatigue and difficulty in concentration, among others, which will cause an apathetic behavior in terms of their activities and in the acceptance of recommendations to try to get out of the spiral of anxiety in which they find themselves.

The psychological and psychopathological sequel as a result of this pandemic, coupled with a lack of individual and group freedom in university students, have greatly impacted mental health, due to the loss of family members in some cases and, in others, suffering from the disease. This has led to situations of anxiety, uncertainty, instability, hopelessness and frustration. Many of these cases have been the prelude to the development of depressive symptoms, with feelings of handicap, apathy, headaches, alterations in instinctive life, feelings of abandonment, suicidal ideas and withdrawal from daily activities, loss of work and, in many cases, the abandonment of university studies, making necessary the timely presence of health professionals for psychopathological and psychotherapeutic intervention with the participation of psychologists and psychiatrists.

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