

Levels of Stress, Anxiety, and Depression in the Second Phase of the COVID 19 Outbreak, Honduras 2020

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Abstract

Background: COVID 19 started in December 2019, to this day it hasn't only damaged health and physical integrity but also the social cognitive.

Objective: Identify the level of stress, anxiety and depression in the second phase of the COVID 19 outbreak, Honduras 2020.

Method: Descriptive-cross-sectional study that had a type of non-probabilistic convenience sampling and a resulting sample of 809 participants, being approached electronically from Google Forms, with statistical analysis of frequencies and percentages plus variable crossovers. It was stratified as a low risk study and adhering to the standards of good clinical practice in research with human beings.

Results: The predominant age was between 28-37 years 60.7% (491), women being the majority 84.8% (682), coming mostly from urban areas with 88.6% (714), personal pathological history, Type 2 Diabetes Mellitus was the predominant one with 27.5% (223) of the total sample, followed by Arterial Hypertension with 24.5% (198). Stress was more incident in the "Moderate" degree with 41.7% (337), "Anxiety" was more present in the "Mild" degree with 52.3% (423), "Depression" in the same category "Mild" with 63% (510) of the total of the participating subjects. "Stress" was the most relevant condition amongst those who did ("YES") have chronic diseases in 51% (410).

Conclusion: There is a behavioral alteration in relation to fear of infection due to fear of contagion, more predominant in people who have a referred base pathology.

Keywords: Coronavirus; Depression; Anxiety; Stress; Chronic Diseases

Introduction

Coronaviruses are not new among living beings on earth, studies throughout the history of humanity show that the first coronavirus arose about 1000 years ago, however, it only affected animal species, especially farm animals [1].

In 2019, the People's Republic of China government, precisely in the month of December, reports an outbreak of pneumonia of unknown origin, however, local experts point out that its etiology came from a wholesale seafood market [2].

Although, by 2002, there was already a history of this virus in the same region. Epidemiology indicates that about 8,000 people were infected, and of these 20-30% required mechanical ventilation. Then there was an outbreak for 2012 through MERS, pointing to some 52 deaths at that time [3].

Presently, the World Health Organization points out that, for July 2020, the statistics indicate at least 20 million cases, 12 million recovered and some 737 thousand people who have died in a confirmed way by PCR tests- COVID-19 [4].

Local statistics, by the Office of Presidential Communications and Strategy, indicate that in Honduras there are around 47,872 confirmed cases, around 6 thousand recovered and more than 1500 deaths so far [5].

Unlike other diseases, COVID is volatile and generates inaccuracy to indicate who may or may not die when suffering from it, some determinations have been made where vulnerable people have been categorized, such as; older people, those with underlying medical conditions, people with disabilities and HIV [6].

The entire joint situation in relation to the measures taken by the governments, has come to generate a series of psychological and social risks, since the feeling of uncertainty is one of the main stressors in any situation that a human being faces [7].

Among which we can mention stress, anxiety, depression, somatization and behaviors; amongst them, the increase in alcohol and tobacco consumption, practices that in the long term will evoke chronic non-communicable diseases, worsen other conditions prior to the pandemic [8].

A systematic review of articles exported from Honduras has been generated in relation to the specific topic of interest, and they have not been found at least, in the databases reviewed by the authors of the manuscript [9].

Methodological Design

Being a descriptive-cross-sectional study, with a non-probabilistic convenience sampling type. The base instrument used was the DASS-21, a scale of items that interrelationships sociodemographic variables and dimensions that analyze behavior patterns, which was stratified in google forms and sent by mail to students of the private company Honduciencias, which is dedicated to health education processes.

Receiving a total of 809 responses. From the data collection, they were converted to EpiInfo in order to generate a crossover of viable variables. At the level of analysis, frequencies and percentages were used. Minors and people with previous psychiatric illnesses were excluded, and all those who voluntarily decided to fill out the questionnaire were included. The study authors are educated in Good Clinical Research Practices.

Results

Among the sociodemographic results, the predominant age was found between 28 - 37 years in 60.7% (491), with women who participated the most in 84.8% (682), coming mostly from urban areas with a 88.6% (714), with 95.3% (771) university education degrees. These variables may have a distinction in relation to Honduciencias promoting higher education programs electronically (See table 1).

Sociodemographic Data	Frecuency	Percent
Age		
18 - 27	204	25.2%
28 - 37	491	60.7%
38 - 47	97	11.9%
Since 48	17	2.2%
Total	100	100%
Sex		
Men	123	15.2%
Women	682	84.8%
Total	809	100%

Procedence		
Urban	714	88.6%
Rural	95	11.4%
Total	809	100%
Scholarship		
Primary	12	1.5%
Secondary	26	3.2%
Superior	771	95.3%
None	0	0%
Total	809	100%

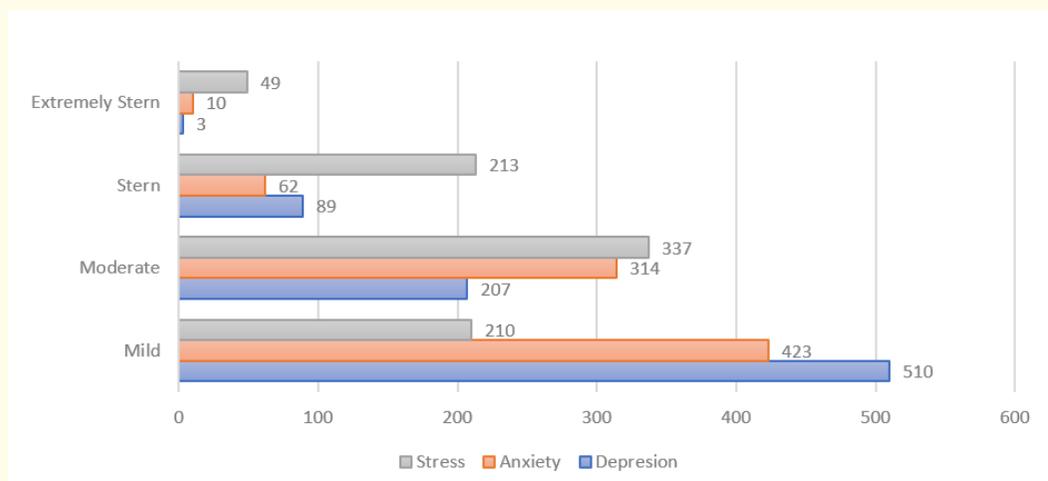
Table 1: Distribution of the sociodemographic variables of the population under study (n = 809).

In relation to personal pathological history, Type 2 Diabetes Mellitus was the predominant one with 27.5% (223) of the total sample, followed by Arterial Hypertension in 24.5% (198). On the other hand, the family history pointed out that Type 2 Diabetes Mellitus is also the predominant one with 25.9% (210), followed by Arterial Hypertension with 23.5% (190) (See table 2).

Pathological Personals Diseases	Frequency	Percent
Asma	177	21.8%
Diabetes Mellitus Type 2	223	27.5%
Hypertension Arterial	198	24.5%
Chronic obstructive pulmonary disease	97	11.9%
Pathological Familiares Diseases		
Asma	201	37.2%
Diabetes Mellitus Type 2	210	25.9%
Hipertension Arterial	190	23.5%
Cancer	31	3.8%
Hyperthyroidism	17	2.1%

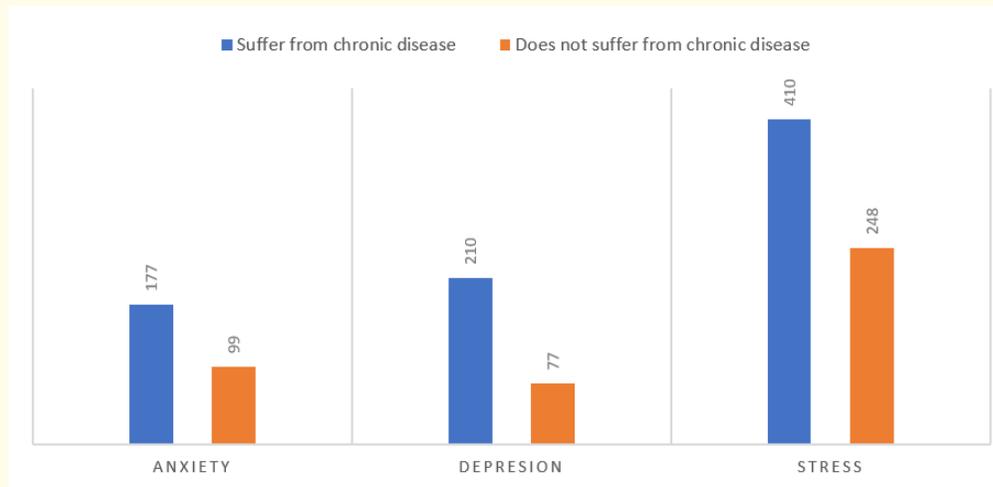
Table 2: Distribution of personal and family pathological antecedents (n = 809).

Among the psychological variables taken into account by the DASS-21, were Stress, Anxiety and Depression, in the first instance stress denoted a variability, being more incident in the degree of "Moderate" with 41.7% (337), followed by " Severe "with 26.3% (213), almost that same value is repeated in " Slight "with 25.9% (210). On the other hand, "Anxiety" was more present in the "Mild" grade with 52.3% (423) of the total participants, finally, "Depression" was located more strongly in the same "Mild" category with a 63% (510) of the total of the participating subjects (See graph 1).



Graph 1: Distribution of the degrees of depression, anxiety and stress according to the DASS-21 scale (n = 809).

Something important that was taken into account was the levels of anxiety, depression and stress in relation to the participants who claimed to have a type of chronic illness, which places them as a vulnerable population to COVID-19. “Stress” was the most relevant condition among those who “YES” had chronic diseases in 51% (410), followed by “Depression” with 26% (210), in that same order was found “Anxiety” With 21.9% (177). For the participants who did not have any suffering, “Stress” was the main psychological factor that affected them in 31% (248) (See graph 2).



Graph 2: Distribution of the appearance of anxiety, depression and stress between participants who have chronic diseases and those who do not (n = 809).

Discussion

Cuiyan Wang, *et al.* [10] in their study conducted in the People’s Republic of China for 2020, they noted that the levels of anxiety, depression and stress in the initial stage of the COVID-19 outbreak was 16% of the participants showed moderate to severe depressive symptoms; 28% moderate to severe anxiety symptoms; and 8% reported moderate to severe stress levels [11]. For the case of the present study, in which one of their analysis criteria was that they had agreed to have some of these types of behavioral alterations, it was also achieved Identifying that these three items had stress levels denoted a variability, being more incident in the degree of “Moderate” with 41.7% (337), followed by “Severe” with 26.3% (213), “Mild” with 25.9% (210), “Anxiety” was more present in “Mild” with 52.3% (423), “Depression” was more strongly located in the same category “Mild” with 63% (510) of the total of the participating subjects.

It should be noted that, for this measurement, although it was redirected towards the alteration due to the situation of the pandemic, it should also be taken into account that Honduras is one of the poorest countries in the region and that extreme poverty was already established before it comes from COVID-19, being unemployment, economic instability and lack of access to health, factors derived from the closure and fall of the economy.

In a study carried out in Canada, concern was also indicated by the population in the face of infection, the fear of infection turned out to be considerable for the short time that the virus had recently arrived in the region [12]. Biological disasters by nature cause lines of fear of stigmatization and this in turn generates the need to carry out psychological interventions [13]. In Honduras there is no adequate intervention strategy in aspects of mental health and this generates more concern about what may happen during and after of the pandemic.

An investigation carried out in Spain indicated that, out of 976 people in the Basque Autonomous Community, 81.1% were women and 18.9% were men. 56.5% were between 18 - 25 years old, 35.6% between 26 - 60 years old and, finally, 8% of 61 and older 14.9% reported having some chronic disease and 85.1% of the sample, on the contrary, did not suffer from any chronic disease [14]. The results for this writing were that the predominant age was found between 28 - 37 years in 60.7% (491), with women who participated the most in 84.8% (682), being 21.3% who claimed to have some type of chronic pathology that placed them at risk from the virus as a vulnerable population.

Dong in China, indicated in his results, that people who had predisposing pathologies had a higher rate of appearance of any of the three types of conduct disorders in relation to those who did not have any underlying disease [15]. Question that converges with the results found for this sample.

Conclusion

The alteration of the behavior of the group under study is altered by the factor of fear of the current pandemic, a lack of timely intervention and investment in psychological education processes is generating a problem even greater than the total risk of suffering from said virus.

Conflicts of Interest

The authors of this study declare no conflicts of interest.

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