Psychological Anguish in Families due to Positive Cases of COVID-19 in the Puente Piedra District Home

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A B S T R A C T

The psychological impact is alarming in families since they are exposed to high risks of contagion because their mental health is altered, therefore, the objective of the research study is to determine the Psychological Impact on families due to positive cases of COVID - 19 in the Puente Piedra district, 2020. This is a quantitative, non-experimental, descriptive, and cross-sectional study, with a population of 22 families with household members infected with COVID - 19 from the Puente Piedra district, who answered a questionnaire with sociodemographic data and the Depression, Anxiety and Stress Scale (DASS-21). In the results where can be observed, with respect to the sex data of the head of the family to whom the questionnaire was carried out, where we can observe with respect to the psychological impact on families by positive cases of COVID-19 at home in the district of Puente Piedra, where the male head of the family 13 (76.5%) of the total have a medium psychological impact and 4 (23.5%) have a low psychological impact, in the female head of the family 4 (80 %) of the total have a medium psychological impact and 1 (20%) have a low psychological impact. In conclusion, greater attention should be paid to vulnerable groups such as the young, the elderly, and women since they are more prone to contracting the disease.

1. Introduction

Concerns about the new coronavirus (COVID - 19) in the world population are becoming more alarming, because it has negative psycho-emotional and psychosocial effects on them [1], therefore the World Health Organization (WHO), maintains that the psychological impact has generated an increase in anxiety, depression and stress in the population as a result of isolation and quarantine as a result of the coronavirus pandemic [2].

In this way, the world population has had a strong impact on their daily lives, likewise while the isolation and quarantine due to the pandemic continues, the population will be experiencing different mental disorders such as nervousness, fear, anxiety, depression and insomnia, all of which can long-term impact if the pandemic can be extended for a long time [3], [4]. More concern in public health is increasing due to the increase in COVID-19 cases in the country, which has generated physical, socioeconomic and psychological impacts on the entire population [5].

Likewise, the pandemic not only affects the daily life of the world population but also has negative impacts on the person as a result of unemployment and the closure of businesses [6], and on the family as a result of isolation at home without any visit, all this has been planned to stop the rapid spread of the coronavirus, still interrupting the daily routines of the person and family where it plays an important role in their health and physical and mental well-being [7], [8].

All this generates on a large scale forms of prevention or strategies that allow protection against this disease [9], [10], where the government implemented measures that allow the population to take care of themselves, therefore strategies such as personal protection measures, correct hygiene hands, home isolation and social distance, are measures that the population will choose in their prevention of contagion by COVID – 19 [11].

In China, it was evidenced in 1210 participants on the mental health of the general population in China, where the results showed that 53.8% had moderate and severe psychological impact, 16.5% with depressive symptoms, 28.8% with anxiety symptoms and 8.1% presented stress and each of them was between moderate and severe, concluding that women are more likely to present psychological impact than men [12].

In India, an online survey was conducted with a total of 1106 among male and female participants from 64 cities in the country,
where the data obtained in their results, the majority of respondents 66.8% presented a minimal psychological impact, 15% mild psychological impact, 5.5% moderate psychological impact and 12.7% severe psychological impact, finding that the psychological impact in women is considerably higher than in men [13].

In Spain, through a questionnaire, it was observed in 1014 participants of the general population, in relation to the threat of COVID-19 and their emotional state during quarantine, giving in their results that 51% of the population presented sadness and depression, 54.7% anxiety and 29.3% hostility; product of the threat of the coronavirus, which is reflected in the population at a cognitive and emotional level (affective and mental) as a result of the quarantine in prevention of the pandemic [14].

Another study in Spain, a study was carried out in 1161 participants between the ages of 19 to 84 years of age, which, in the results, it was observed that the psychological impact was more reflected in the fear of COVID-19, sleep problems, stress, anxiety and depression are factors that were prioritized more because they alter the mental health of the participants during confinement by COVID – 19 [15].

The objective of the research work is to determine a psychological impact on families due to positive cases of COVID-19 in the Puente Piedra district, 2020, in which, it will allow us to observe what is the psychological impact that exists in families of

in the Puente Piedra district.

Therefore, the hypothesis maintains that the psychological impact on families with positive cases for COVID-19 considerably affects the psycho-emotional level in family members.

This study is important since it provides us with data based on the reality of families that are mentally vulnerable caused by the COVID-19 pandemic.

2. Methodology

2.1. Type of Study

It is a study with a quantitative approach, with a descriptive, non-experimental and cross-sectional study methodology [16].

2.2. Population

In the research work, it was made up of 22 families from the Puente Piedra district of the Micaela Bastidas Association.

2.3. Inclusion criteria

- Families with one or more family members infected with COVID - 19 at home.
- Families who signed the informed consent.

2.4. Technique and instrument

The survey was used as a data collection technique, including the DASS - 21 instrument with the objective of measuring the psychological impact in families with positive cases of COVID - 19.

The depression, anxiety, and stress scale (DASS-21), each of the three DASS scales contains 14 items, divided into subscales of 2 to 5 items with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-loathing, lack of interest or participation, anhedonia, and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and the subjective experience of anxious affect. The stress scale is sensitive to levels of non-specific chronic arousal. It evaluates the difficulty to relax, the nervous excitement and the discomfort, agitation, or irritation, over reactivity and impatience. It consists of 4 answer alternatives, 0 "not at all", 1 "sometimes", 2 "most of the time" and 3 "most of the time" that serve to rate the degree to which they have experienced each state during last week. To obtain the final score of the DASS-21, the total score obtained must be multiplied by two (data x2) [17].

At the statistical level, the instrument was validated using the Kaiser-Meyer-Olkin (KMO) test, resulting in a sample adequacy of 0.203 and the Bartlett's Sphericity Test of 0.000 ($X^2 = 353.725$; $gl = 210$; $p < 0.05$), and to determine the reliability of the instrument, it was performed using Cronbach's Alpha statistical test, determining an internal consistency index of 0.802 ($\alpha > 0.6$).

For data processing, a matrix drawn up in the statistical program Statistics Base 26.0 (SPSS) was entered, where the analysis was carried out for the elaboration of tabulations and figures for the interpretation in their respective results and discussions.

2.5. Place and application of the instrument

The questionnaire carried out to measure the psychological impact on families due to positive cases of COVID-19 at home, was carried out in North Lima, in the Puente Piedra district, of the Micaela Bastidas - Zapallal Association.

It was coordinated respectively for the study with the head of the family to carry out the survey, once this, it was explained what the study is about and why the research survey was carried out.

The survey was carried out during the presence of the head of the household with a certain time for filling in the survey of approximately 15 minutes, concluding with satisfaction when collecting the surveys since the families supported our study.

It is important to emphasize the presence of the family at the time of filling in the questionnaire, since they were also given information about questionnaire, and why it is being carried out, all this was done to generate trust with the family allowing to carry out the present research work.

3. Results

Below is a summary table of the surveys carried out following the guidelines corresponding to the research work:

In Table I, the psychological impact in relation to the sex of the head of the family is related, in which it is determined with the Pearson chi-square test ($X^2$), the significance level of the test obtained a value of 1.14 ($p > 0.05$) ($X^2 = 0.869$; $df = 1$). therefore, a hypothesis of association between variables is not rejected, which is why it is verified that there is a relationship between the psychological impact and the sex of the head of the family.

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Table 1: Psychological Impact on Families in relation to the head of the family for positive cases of COVID-19 in the Puente Piedra district, 2020

<table>
<thead>
<tr>
<th>Sex of the Head of Household</th>
<th>Count</th>
<th>Low</th>
<th>Medium</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>4</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>% within Sex of the Head of Household</td>
<td></td>
<td>23.5%</td>
<td>76.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>% within Sex of the Head of Household</td>
<td></td>
<td>20.0%</td>
<td>80.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>% within Sex of the Head of Household</td>
<td></td>
<td>22.7%</td>
<td>77.3%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Chi-square tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic significance (bilateral)</th>
<th>Exact significance (bilateral)</th>
<th>Exact significance (unilateral)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson's Chi-square</td>
<td>.027a</td>
<td>1</td>
<td>.869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity correction</td>
<td>.000</td>
<td>1</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood ratio</td>
<td>.028</td>
<td>1</td>
<td>.867</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's exact test</td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td>.687</td>
</tr>
<tr>
<td>Linear by linear association</td>
<td>.026</td>
<td>1</td>
<td>.872</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N° of valid cases 22

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a. 3 cells (75.0%) have expected a count less than 5. The minimum expected count is 1.14.

b. It has only been calculated for a 2x2 table

Psychological Impact according to Type of Family

Figure 1: Psychological Impact on Families in relation to the Type of Family for positive cases of COVID-19 in the Puente Piedra district Home, 2020

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Therefore, it can be interpreted that the sex data of the head of the family to whom the questionnaire was carried out, where we can observe with respect to the psychological impact on families due to positive cases of COVID-19 in the Puente Piedra district, where the Male head of household 13 (76.5%) of the total have a medium psychological impact and 4 (23.5%) have low psychological impact, in the female head of household 4 (80%) of the total have an impact medium psychological impact and 1 (20%) has low psychological impact.

Figure 1 shows the data in relation to the type of family, where it can see that 9 (100%) of the nuclear family type has a high psychological impact, 3 (25%) of the nuclear family type has a low psychological impact, 3 (100%) of the single parent type have a high psychological impact, 3 (60%) of the extended family type have a high psychological impact, 2 (40%) of the extended family type have a low psychological impact, 1 (100%) of the expanded family type has a high psychological impact and 1 (100%) of the reconstituted family type has a high psychological impact.

In Figure 2, the data are shown in relation to the depression dimension, where 17 (77.3%) of the total presented mild depression, 3 (13.6%) of the total presented normal depression and 2 (9.1%) of the total presented moderate depression.

In Figure 3, the results of the anxiety dimension are observed, where 13 (59.1%) of the total presented moderate anxiety, 6 (27.3%) of the total presented mild anxiety and 3 (13.6%) of the total presented normal anxiety.

In Figure 4, the results of the stress dimension are observed, where 19 (86.4%) of the total presented normal stress and 3 (13.6%) of the total presented mild stress.

4. Discussion

In this study, emphasis the psychological impact from the point of view of promoting mental health in families, in which it seeks to contribute programs that allow families to benefit to face situations that generate an alteration in their mental health allowing cope with this emergency due to the COVID-19 pandemic.

These results that were obtained reflect the mental health that families have during the outbreak of the COVID-19 pandemic in Peruvian families, making them susceptible to depression, anxiety, and stress. In the head of the family, it was observed that the psychological impact occurred more in men than in women, this is since the male as head of the family must support the family economically and emotionally, therefore when he sees that one of his relatives infected by COVID-19, their mental health is altered. In [12], they argue that women are the most vulnerable than men, since age, sex, being a student and presenting some physical symptoms of their own health, are factors of high psychological impact and that increase anxiety levels, stress and
depression. In the same way in [13], they argue that women have a greater psychological impact due to the COVID-19 pandemic than men because physical comorbidities were predictors of having a greater psychological impact in response to the pandemic. Comparing the results with the studies discussed, we can see that in the statistical samplings in our results it is observed that men have more psychological impact than women, on the other hand, in the studies that are discussed, women represent the majority of the population with a high psychological impact where the pictures of depression, anxiety and stress turn out to be highly elevated.

In relation to the type of family, the nuclear type of family is the most altered, because the COVID-19 pandemic has been crucial in the family, factors such as isolation within the home, unemployment, job instability due to the pandemic, the fear of contracting the disease when leaving the home have generated a certain degree of anxiety and stress in the parents. In [4], they argue that single mothers without support during the pandemic have had high rates of depression, anxiety and stress, therefore, this implies the importance of family support to face the COVID-19 epidemic. In [18], argue that loneliness, social isolation and financial stress are risk factors that affect poor physical and mental health, where the well-being of the person and the family are vulnerable to becoming infected with COVID - 19.

In its dimensions, the most altered was anxiety, this is because the family must face this crisis product of the COVID-19 pandemic where one of their relatives has been infected, where the isolation of the family member infected by COVID-19 has generated a feeling of nervousness and tension in the family members who take care of it, likewise in [12], they maintain that the female sex as the main member of the household at the same time that the male sex presents symptoms such as myalgia, dizziness, coryza, maintaining that they do not have an adequate perception of their well-being of their own health that avoids contagion by COVID - 19. In [14], they argue that the cognitive and emotional states of people as a result of quarantine, make people perceive the threat of COVID - 19 in a highly negative way, where emotional states, such as sadness, depression, anxiety and irritability, aggravate the psychological well-being of the person, damaging their well-being of the same and of the s family members. In the studies discussed, it is observed that in China 28.8% of its population shows a high index of anxiety and in Spain 54.7%, in comparison with our study 59.1% have a moderate index of symptoms anxiety, all this is based on how they can handle or face quarantine without affecting their mental health, therefore the management of strategies that allow them to maintain their mental health in perfect condition.

5. Conclusion

It is concluded that the family due to COVID-19 must have the ability to cope when one of their relatives contracts the disease and be able to emotionally cope with this situation without disturbing the other members of the family.

It is concluded that greater attention should be paid to vulnerable groups such as the young, the elderly, and women since they are more prone to contracting the disease.

It is concluded that the accessibility of health services for the family on prevention and coping strategies on mental health due to the COVID-19 pandemic should be considered.

We can conclude that in our country the susceptibility of presenting symptoms of depression, anxiety and stress is higher than in comparison to other countries.

It is concluded that anxiety is a primary factor that more compromises people who already have a mental condition for this reason, in our study we can observe that the majority of the population presents symptoms of anxiety compared to other studies that manage strategies that allow to reduce the anxiety.

Health strategies that allow families to have access to virtual mental health care are recommended.

The importance of preventive measures focused on the mental health of people during epidemics, which are developed by mental health personnel, is recommended, suggesting that mainly risk groups be identified for their care.

This research work will be beneficial for future studies, since the COVID-19 pandemic will leave consequences on people's mental health, and thus the consequences that COVID-19 will allow the development of research strategies that allow establish preventive measures on themselves.

Conflict of Interest

The authors declare no conflict of interest.

References


