Resilience During the COVID-19 Pandemic in Female Heads of Household Residing in a Marginal Population in Lima

Rosa Perez-Siguan*1, Anne Tenorio-Casaperalta2, Lucy Quispe-Mamani2, Luis Paredes-Echeverría2, Hernan Matta-Solis1, Eduardo Matta-Solis1

1Research and Intellectual Creativity Direction, Universidad María Auxiliadora, 15408, Lima-Perú
2Faculty of Health Sciences, Universidad María Auxiliadora, 15408, Lima-Perú

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ABSTRACT

Resilience is the way in which the person develops their self-determination to solve conflicts that compromise their physical and mental well-being in the face of a crisis such as the COVID-19 pandemic, therefore the objective of this study is to determine resilience during the COVID-19 pandemic in female heads of household residing in a marginal population in Lima. It is a quantitative, non-experimental, descriptive, and cross-sectional study, with a total population of 650 and a sample of 590 in the study, who answered a questionnaire with sociodemographic data and the Connor and Davidson Resilience Scale in its short version of 10 items. The results show the total resilience of female heads of households, 271 (45.9%) of women heads of households have moderate resilience, 186 (31.5%) have high resilience and 133 (2.5%) have low resilience. In conclusion, it is recommended to seek strategies that allow women to improve resilience since this will benefit them to be able to overcome and face what is experienced by the COVID-19 pandemic.

1. Introduction

In the world, the coronavirus pandemic (COVID-19) has taken the entire population by surprise [1], where they are mainly reflected in the capacities that individuals have to face this stressful situation, where personality and psychological functioning are seen affected in the well-being of each individual [2].

In the same way, the population in the world has had to take measures to have the capacity to face these situations due to the COVID-19 pandemic that compromise their mental and emotional health as a result of social isolation and by not doing their daily routines [3], in such a way so that the resilience that each individual possesses decreases [4]. Resilience is the capacity of each individual to face traumatic circumstances caused by COVID-19, but this decreases due to the fact that anxiety, depression and post-traumatic stress are evident in the population as a result [5], [6].

As a result, the resilience that each individual possesses to face this global crisis is not adequate, because contagion in one of its family negatively compromises facing it, leading to factors of depression, anguish, sadness [7].

Resilience is of vital importance to cope with stress and to maintain balance in mental health [8], where it acts against the effects generated by stress and also on sleep quality [9]. For this reason, the resilience that is sought to be acquired during the COVID-19 pandemic will improve each individual and allow them to face this situation in a healthy way that helps mentally both in their person and family [10], [11].

In a study in Spain [12], it was observed in 459 participants that resilience in 139 (30.6%) of the participants had a low resilience, while 115 (25.4%) had a high level of resilience, but that the scores falls were more related to obsessive thoughts and fear due to the pandemic that compromised sleep.

In a study from the United Kingdom [13], the author mention in their results of 250 female participants, they stated that 18.9% of the participants presented a lower level of resilience, but 65% obtained a moderate and high resilience, where it means that the Participants have resilience characteristics that they do not

*Corresponding Author: Rosa Perez-Siguas, rosa.perez@uma.edu.pe
necessarily need to strengthen in order to improve their ability to cope with any situation that compromises their health.

In a study from Peru [14], the authors presented in the results of 315 female heads of household surveyed on resilience, it was observed that 49% of women presented a moderate level of resilience, 27.9% presented a high level of resilience and 22.9% a low level of resilience, this is due to the fact that the pandemic generates a situation of conflict, where the lives of women become more compromised because they live in an area where the economic crisis is present long before the pandemic.

In a study from Israel [15], in their results of 300 participants they verified a relationship between resilience and individual well-being where they significantly and negatively interpreted the feeling of danger and symptoms of distress, where the greater the individual resilience and well-being, the lower the feeling of danger and symptoms of distress in the population.

Therefore, this study seeks strategies that improve resilience in women heads of households where it allows them to face this COVID-19 pandemic in a way that does not harm their physical and mental health.

The objective of the research work is to determine the resilience during the COVID-19 pandemic in women heads of households who reside in a marginal population in Lima. In which it will give us important data that allow us to observe how resilience is in women heads of household.

2. Methodology

In this part, the type and design of the research was developed, also the population which the research work was carried out, the inclusion and exclusion criteria will also be given in detail and finally the technique and instrument of data collection.

2.1. Research type and Design

In the study, due to its characteristics, way of collecting data and measuring the variables involved, has a quantitative approach. Regarding the methodological design, it is a non-experimental, descriptive, cross-sectional study [16].

2.2. Population and sample

The total population was 650 female heads of household who were identified, of which 590 agreed to participate voluntarily and signing the informed consent.

Inclusion Criteria

- Women heads of households who have leadership and decision-making in the family within the household.
- Female heads of household who reside at least 6 months in the area.
- Women who participate voluntarily and who gave their informed consent.

2.3. Technique and Instrument

The technique used is the virtual survey of the Google form, in which, through the data collection instrument, the Connor and Davidson Resilience Scale in its short version of 10 items (CD-RISC 10) that aim to measure the Resilience during the COVID-19 pandemic in female heads of household residing in a marginal population of Lima.

For data collection, it has been structured in 2 blocks: 1. Sociodemographic data such as age, marital status, level of education and current occupation; 2. CD-RISC 10 that comprises 10 items in which it presents a one-dimensional dimension with the 10 respective items, in which it is assessed with a Likert-type scale with 5 response options: “0 = never”, “1 = almost never”, “2 = sometimes”, “3 = almost always” and “4 = always”, obtaining a total score by adding all its items, so that its score would be from 0 to 40 points, where “0 to 9” is a low resilience, “10 to 30” moderate resilience and “31 to 40” high resilience, the higher the score corresponds to a higher resilience in female heads of household [17].

The validity of the instrument was determined based on the exploratory factor analysis technique with Varimax rotation. The Kaiser-Mayer-Olkin sample adequacy measure obtained a coefficient of 0.894 (KMO> 0.5), while the Bartlett sphericity test obtained significant results ($X^2$ approx. = 10708.291; gl = 45; p = 0.000). The measures of sampling adequacy of the anti-image diagonal obtained significant coefficients for the 10 items (MSA> 0.8). The principal components analysis determined that there is a single factor that explains the variance by 85.125%. Since there is only one factor, the matrix of rotated components could not be extracted. For all the above, the instrument is considered valid.

The reliability of the instrument was determined based on Cronbach's Alpha statistical test, the same one that obtained a coefficient of 0.980 ($\alpha$> 0.8) for all the items ($i=10$).

In this research, the data to be entered was given in a data matrix that was designed in the statistical program IBM SPSS Statistics Base 25.0, its corresponding analysis was carried out, in which it will allow us a better processing of data to make tables and statistical graphics so that they are later described and interpreted in results and discussions, respectively.

2.4. Place and Application of the Instrument

The virtual survey was carried out to measure resilience during the COVID-19 pandemic in women heads of households who reside in a marginal population of Lima, in which it was carried out in the district of Comas in the Carmen Alto area, which is a vulnerable area where they do not have basic services (water, electricity, sewage), where most of the families live in poverty and extreme poverty, since most of the family members do not have stable jobs, everything is done eventually.

3. Results

The results of the surveys carried out following the guidelines corresponding to the study will be shown in figure 1:

Figure 1 shows the results of the total resilience of women heads of households where 271 (45.9%) of women heads of household

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households have moderate resilience, 186 (31.5%) have high resilience and 133 (2.5%) have low resilience. Regarding high resilience, it is the person who faces extreme situations such as COVID-19 and that leads to maintaining their emotions, maintains their self-confidence and self-motivates to get ahead, moderate resilience, is the person who keeps their impetus to go out forward in the face of the COVID - 19 crisis and low resilience is the person who does not face the situation due to the COVID - 19 pandemic, leading to depressive symptoms and anxiety due to this fact.

In relation to the total resilience and the marital status of women heads of household, it was verified using Pearson's Chi-square test ($X^2$) to determine the relationship between both variables, where the level of significance of the test obtained a value of 1.35 ($p > 0.05$) ($X^2 = 3.632; df = 6$). Therefore, emphasis is placed on a hypothesis of association between both variables. Therefore, we interpret that women heads of household in relation to their single marital status have a moderate resilience 61 (43.9%), as does the marital status married 51 (49%), cohabiting 156 (45.7%) and widowed marital status 3 (50%) have moderate resilience and 3 (50%) have high resilience.

Table 1: Resilience during the COVID - 19 pandemic in female heads of household in relation to marital status residing in a marginal population of Lima

| RESILIENCE | LOW | Count | % within marital status | Total |
|------------|-----|-------|-------------------------|-------|
| Single     | 30  | 21    | 24.0%                   | 133   |
| Married    | 61  | 51    | 49.0%                   | 271   |
| Cohabiting | 82  | 156   | 45.7%                   |       |
| Widow      | 0   | 3     | 50.0%                   |       |

| MODERATE   | Count | % within marital status | Total |
|------------|-------|-------------------------|-------|
| Single     | 61    | 43.9%                   | 271   |
| Married    | 51    | 49.0%                   |       |
| Cohabiting | 156   | 45.7%                   |       |
| Widow      | 3     | 50.0%                   |       |

| HIGH       | Count | % within marital status | Total |
|------------|-------|-------------------------|-------|
| Single     | 48    | 34.5%                   | 186   |
| Married    | 32    | 30.8%                   |       |
| Cohabiting | 103   | 30.2%                   |       |
| Widow      | 3     | 50.0%                   |       |

| Total      | Count | % within marital status | Total |
|------------|-------|-------------------------|-------|
| Single     | 139   | 100.0%                  | 590   |
| Married    | 104   | 100.0%                  |       |
| Cohabiting | 341   | 100.0%                  |       |
| Widow      | 6     | 100.0%                  |       |

Table 2: Resilience during the COVID-19 pandemic in female heads of household in relation to the level of education who reside in a marginal population of Lima

| RESILIENCE | LOW | Count | % within Level of instruction | Total |
|------------|-----|-------|------------------------------|-------|
| Without Instruction | 14  | 20.9% | 133                          |
| Primary     | 25  | 27.8% |                             |
| Secondary   | 59  | 19.7% |                             |
| Superior University | 2  | 33.3% |                             |
| Superior Technical | 33  | 26.0% |                             |
| Total       | 133 |      |                             |

| MODERATE   | Count | % within Level of instruction | Total |
|------------|-------|------------------------------|-------|
| Without Instruction | 31  | 46.3% | 271                          |
| Primary     | 38  | 42.2% |                             |
| Secondary   | 145 | 48.3% |                             |
| Superior University | 2  | 33.3% |                             |
| Superior Technical | 55  | 43.3% |                             |
| Total       | 271 |      |                             |

| HIGH       | Count | % within Level of instruction | Total |
|------------|-------|------------------------------|-------|
| Without Instruction | 22  | 45.6% | 186                          |
| Primary     | 27  | 42.2% |                             |
| Secondary   | 96  | 48.3% |                             |
| Superior University | 2  | 33.3% |                             |
| Superior Technical | 39  | 43.3% |                             |
| Total       | 186 |      |                             |

Chi-square tests

| Value | df | Asymptotic significance (bilateral) |
|-------|----|------------------------------------|
| Pearson's Chi-square | 3.632* | 6 | .726 |
| Likelihood ratio     | 4.875 | 6 | .560 |
| Linear by linear association | .250 | 1 | .617 |

N° of valid cases | 590

a. 3 cells (25.0%) have expected a count less than 5. The minimum expected count is 1.35.
### Chi-square tests

|                          | Value | df | Asymptotic significance (bilateral) |
|--------------------------|-------|----|-------------------------------------|
| Pearson's Chi-square     | 4,456 | 8  | .814                                |
| Likelihood ratio         | 4,388 | 8  | .821                                |
| Linear by linear association | 1.184 | 1  | .668                                |

* N° of valid cases = 590

#### Table 3: Resilience during the COVID-19 pandemic in female heads of household in relation to the occupation that reside in a marginal population in Lima

| RESILIENCE | Current Occupation | Total |
|------------|--------------------|-------|
|            | Stable worker      |       |
| LOW        | Count              | 1     |
| % within current occupation | 10.0% | 24.5% |
| MODERATE   | Count              | 5     |
| % within current occupation | 50.0% | 41.9% |
| HIGH       | Count              | 4     |
| % within current occupation | 40.0% | 33.6% |
| Total      | Count              | 10    |
| % within current occupation | 100.0% | 100.0% |

#### Chi-square tests

|                          | Value | df | Asymptotic significance (bilateral) |
|--------------------------|-------|----|-------------------------------------|
| Pearson's Chi-square     | 4,088 | 4  | .394                                |
| Likelihood ratio         | 4,258 | 4  | .372                                |
| Linear by linear association | .217  | 1  | .642                                |

* N° of valid cases = 590

In relation to the total resilience and the level of education of women heads of household, it was verified using Pearson's Chi-square test ($X^2$) to determine the relationship between both variables, where the level of significance of the test obtained a value of 1.35 ($p > 0.05$) ($X^2 = 4.456; df = 8$). Therefore, emphasis is placed on a hypothesis of association between both variables. Therefore, we interpret that female heads of household with stable work have moderate resilience 5 (50%), with temporary work 111 (41.9%) have moderate resilience and no occupation 155 (49.2%) have moderate resilience.

### Discussion

In this research work, the approach to mental health of women heads of household was revealed, emphasizing the ability to resolve conflicts or face situations that compromise their health due to the COVID-19 pandemic.

In the results of resilience during the COVID-19 pandemic in women heads of households present a moderate level of resilience, in our findings it has been observed that due to the coping with the danger caused by COVID-19 in the society and in the families, women who are heads of households have anticipated this great change and have sought a way to resolve this conflict in order to maintain the well-being of their children, also, it has been foreseen that the resilience in families has been maintained without the financial support of the state, but that the state does need social or
family support to support it at home. In [12], the authors maintain that mainly in women who do not have family support, they tend to manifest depressive symptoms and anxiety because they cannot support their family and this leads to poor health in them. Similarly in [13], the authors identify that depression and anxiety manifest themselves because the individual cannot cope with the problems caused by the COVID-19 pandemic, where one of their relatives is infected or has died, all this has repercussions on the head of the household and can compromise their physical and mental well-being.

In the results of resilience with marital status, it is interpreted that in family’s resilience is important since this will allow them to reorganize and recover their optimal levels of functioning and well-being in the family that is subjected to stress because of the pandemic of the COVID - 19. In [15], the authors argue that resilience within the family is very important because supporting each family member will allow them to maintain a balance in their mental health during the COVID - 19 pandemic, since this has generated symptoms such as depression, anxiety and stress due to social isolation and quarantine.

In the results of resilience with the level of education, we can interpret that it is important to be resilient since it favors the person for their self-process in the face of any coping situation, especially during the health crisis due to COVID - 19. In [4], the authors argue that being resilient during the COVID-19 pandemic will allow them to improve their coping skills and self-determination in any dangerous situation and allow them to overcome any circumstance within the family.

5. Conclusions

It is concluded that resilience is important since it is a protective factor to an adaptation response to stressful situations such as the COVID-19 pandemic.

It is concluded that psychological support should be given to the population according to their needs and vulnerability due to the COVID-19 pandemic.

It is concluded that the present study emphasizes the understanding of female heads of households who have an inappropriate state of mind during the COVID-19 pandemic.

It is recommended to look for strategies that allow to improve the resilience of women since this will benefit them to be able to overcome and face what is experienced by the COVID - 19 pandemic.

The limitation of this research work is that there are few studies in our country and that access to the mothers’ homes was not adequate since some were not present or did not want to be present in the study.

Conflicts of Interest

The authors declare no conflict of interest.