Research Article

Violence against women index in Peru

José Calizaya-López, Ana Miaury-Vilca, Yaneth Aleman-Vilca, Hilda Pinto-Pomareda, Merly Lazo-Manrique, Teresa Yañez-Fernandez, Yenny Asillo-Apaza

Universidad Nacional de San Agustín de Arequipa, Arequipa 04001, Peru

*Corresponding author: José Calizaya-López, jcalizayal@unsa.edu.pe

ABSTRACT

The Violence Against Women Index is a measure that evaluates the evolution of violence in a given context to understand the severity of the problem, which is a public health issue. **Objective:** This study aimed to measure the violence against women index in Peru according to sociodemographic variables. **Method:** The study was descriptive, comparative, quantitative, and cross-sectional; 1565 women who had experienced violence participated and were intentionally sampled. A validated measurement instrument was used to assess the rate of violence against women. **Results:** A moderate level (54.1%) of violence against women was found with a tendency to increase severely (33.7%, significant indices). In addition, differences were found in the index of violence according to sociodemographic variables of women ($p < 0.05$). **Conclusion:** violence does not distinguish women from being victims because of their social, family, economic, educational, cultural, or residential status; however, there is a greater probability of severe violence in adult women with a low level of education.

**Keywords:** violence index; women; psychological violence; physical; sexual violence

1. Introduction

The violence against women index is a measure that evaluates the evolution of violence in a given context, considering multidimensional aspects such as the human rights approach, life stage, educational level, economic, family, cultural, religious, labor, and political condition of women; using tools and logical instruments that determine mild to severe violence to assess the degree of violence. Even the prediction of femicide, in this sense, this measurement has been increasing year after year, becoming a public health problem.

According to the demographic and family health survey of the National Institute of Statistics and Informatics, 66.3% of women who had ever been married (married, cohabiting, divorced, separated, or widowed) stated that their husband or couple exercised some form of control over them; 21.7% reported that their husband or couples had threatened them to leave the house. Take away your children or withdraw financial support. Likewise, 27.1% said that they were victims of physical violence and 6% of sexual violence by their husband or couples (pushing, hitting, kicking, threatening with a knife or gun, having sexual relations without their consent, or performing sexual acts not approved by the woman) and 50.1%. They indicated they were victims of psychological violence (insults, slander, shouting, insults, mockery, humiliation, among the...
most prominent).

In this sense, violence against women occurs daily\[^5,6\], generally in relationships, with the prevalence of physical and psychological violence being observed, with the man commonly being the aggressor and the woman the victim, manifesting itself in physical aggressions (slapping, hitting with hands, feet or objects), psychological aggressions (denigrating, denigrating, denigrating, denigrating, denigrating humiliating, shouting, insulting), sexual coercion and intimidation, as well as isolating them from their family, friendship and work environment, restricting their access to information and the family economy, controlling their movements, evidencing a form of socio-economic violence\[^7\].

About the main risk factors associated with committing violent acts by aggressors against women, they focus on a low level of education, history of violence in childhood, use and abuse of drugs and alcohol, acceptance of violence, presence of violence in the parents of the family of origin, economic-emotional dependency and gender inequality\[^8\]. A situation that affects the mental health of the victim, the aggressor, and the other members of the family system, children, and other cohabiting relatives\[^9\].

Likewise, for Guerra\[^10\], another important aspect in the analysis of the issue of violence against women is the social stereotype about the role of women in a macho society; even though women have gained public and labor space, in this type of society, domestic roles continue to be attributed to women. Depending on man both emotionally and economically\[^11\].

Therefore, in the context we are currently experiencing, violence, in general, has been conceived as a typical situation that occurs daily in Peruvian homes. It is not distinguished by age, sex, religion, race, area of residence, educational level, or economic situation. It happens in most of these families, and the critical and condemnable nature of this social problem\[^12\]. This is when it goes so far as to murder the woman\[^13\].

Likewise, from the review of previous studies that are more significant, current, and related to the present study in the Peruvian context, some research was found that explains this reality. During the pandemic, more than 79,800 violence cases against women were attended by the Ministries of Women and Vulnerable Populations, prioritizing psychological violence and physical and sexual violence, concluding that the victims lived with the aggressor in extreme vulnerability\[^14\]. Likewise, Palacios et al.\[^15\] argue that violence against Peruvian women is a psychosocial problem because they are affected by severe psychological, physical, and sexual violence, which significantly impacts the mental health of the victims, demonstrating that acts of violence continue to be minimized by society at large, and Roda\[^16\] analyzed the current situation of violence against women from the systemic review that was carried out. They found a high impact on most people during their life experience, and those who suffer the most from this social problem are women who depend on their couples, becoming victims of verbal abuse, physical and sexual at high rates.

From what has been described, it can be seen that there is still a need to collect relevant scientific evidence on the index of violence against women in the Peruvian context, to contrast the information handled by the official statistical body in Peru to compare and understand the high rate of violence to which women are exposed, to improve all the actions that the different institutions are carrying out to protect the integrity of women, like: showing statistical information that allows us to understand the high rates of violence that women may suffer, and the facts or reasons why abuse is not reported, the normalization of violence, fear, the lack of trustworthiness in the authorities, and shame among the most important.

Also, violence prevention must be carried out at all educational levels from childhood, promoting a culture of peace between genders, combating myths and social norms that strengthen violence. Furthermore, public policies must be improved in order to guarantee real protection for victims and adequate treatment for the aggressor and the family environment; It is necessary to train, design strategies and inform the National Police,
the Women’s Emergency Centers, the Public Ministry and the Judiciary, which are responsible for promptly addressing cases of violence in its different forms and types, prioritizing their actions in order to avoid the outcome of serious violence that can lead to femicide, being a public matter where authorities and civil society must be alert to denounce these acts that only cause harm and suffering to this population sector.

Therefore, the objective was to measure the violence against women index in Peru according to sociodemographic variables.

2. Materials and methods

The STROBE cross-sectional reporting guidelines were used, which are detailed below:

2.1. Type of study

The study was descriptive-comparative, with the purpose of measuring, characterizing, observing and comparing the behavior of the variable according to the sociodemographic variables of the women, a quantitative cross-sectional approach. The information was collected in Arequipa, Peru, from May to July 2023.

2.2. Participants

A total of 1565 women participated from the city of Arequipa, who are in or were in a relationship; they were chosen through the non-probabilistic, intentional sampling technique, including women over 18 to 60 years of age who had gone through an intimate couple violence event, participating voluntarily; excluding underage women and/or girls, pregnant women, with a disability (which prevents their participation), and who did not wish to participate in the study.

The G-Power program was used to calculate the sample size, taking into account the following aspects: the mean t-test (differences between two groups) with a small effect size (0.20), probability (0.95), and margin of error (0.05) and the ANOVA test with fixed effects, omnibus, unidirectionality (differences in more than two groups) with small effect size (0.10), probability (0.95) and margin of error (0.05) for three (3) groups, a minimum sample of 1548 participants was estimated.

Given that it’s a cross-sectional and non-probabilistic study, more robust statistical analyzes could not be carried out. Furthermore, the issue of violence is a very personal situation for women that can invade their emotional state, contexts that can lead to increasing bias in the study.

2.3. Instrument

The instrument used was the abuse against women index\textsuperscript{[17]}. The pre-elaborated scale was taken from the manual for the professional and comprehensive approach to violence against women\textsuperscript{[18]}. The instrument evaluates the rate of abuse or violence presented by women. Therefore, the higher the score, the worse the damage and danger, increasing the rate of women victims of violence. The scale consists of 30 Likert response items, and the scores are between 1 and 5, where one is “never,” and 5 is “almost all the time.”; The total score on the scale ranges from 30 (mild violence) to 150 (severe violence). The instrument was validated using the scale pre-established by the author\textsuperscript{[17]}.

The construct validation for Peru was carried out by Diaz de la Vega and Miaury\textsuperscript{[19]}. A content validity analysis was submitted by five judges who are experts in gender violence or violence against women, which obtained valid averages that presented good writing, content, unity, and relevance. Exploratory factor analysis was applied, obtaining two factors that explain 69.51% of the variance. The Kaiser-Meyer-Olkin coefficient was 0.98, which showed the adequacy of the data. Confirmatory factor analysis on the 2-factor structure demonstrates evidence of an adequate fit. $\chi^2(404) = 2.360; \ IFC \ = \ 0.946; \ TLI \ = \ 0.942; \ RMSEA \ = \ 0.063 \ (90\%$
The reliability analysis of the total test was carried out using Cronbach’s alpha of $\alpha = 0.981$ of the 30 items to evaluate the instrument’s internal consistency.

In addition, some sociodemographic characteristics were included in the instrument, such as age, place of origin, level of education, and occupation, and informed consent data were added. The reliability analysis of the tool for the selected sample was performed through the McDonald’s Omega test. Therefore, the instrument has good reliability when the omega values ($\omega$) $\geq 0.700^{[20]}$. For that case, $a(\omega) = 0.978$ was obtained on the scale according to the measurement is highly reliable.

2.4. Procedure

The instrument was applied individually to the women in person (contacting them, in the community health centers, and supply centers) after informing them of the objective of the research, the instructions of the scale and the confidentiality of the data provided, agreeing to participate voluntarily (admitting the respective informed consent), the identity of the women who completed the form was protected.

2.5. Data analysis

The JAMOVI program was used in version 2.3.13 for the statistical analysis. Previous scanning of the data in a file of the .xlsx extension (Excel). Then, the data’s distribution, asymmetry, kurtosis, and normality were analyzed with the Shapiro-Wilk test, showing no normal distribution ($p < 0.05$). In addition, homogeneity of variance tests was performed (they are not the same). Considering using non-parametric tests. A descriptive and comparative analysis the violence against women index was carried out according to age, life stage, level of education (schooling), and occupation.

To compare two independent samples, the Mann-Whitney U was used with their respective effect size (TE), the calculation of the biseral correlation ($r_{bis}$) was performed, obtaining that the interpretative norms are: no effect ($r_{bis} \leq 0.0$), small ($r_{bis} \geq 0.10$), medium ($r_{bis} \geq 0.30$) and large ($r_{bis} \geq 0.50$). Independent k samples were compared with Kruskal Wallis’s H and Pos Hoc tests. Its effect size was epsilon squared ($\epsilon^2$)$^{[21]}$, with its interpretative norms small for $\epsilon^2 \geq 0.01$, medium for $\epsilon^2 \geq 0.06$, and large for $\epsilon^2 \geq 0.14^{[22]}$.

2.6. Ethical considerations

The study was carried out under the ethical considerations for health research with human beings under the guidelines of the Ministry of Health through Ministerial Resolution No. 233-2020-MINSA, published on 27 April 2020. Its purpose is to promote that health research with human beings is carried out under national and international ethical standards.

In addition, the approval of the ethics committee of the Universidad Católica San Pablo-Peru was obtained (Acta 033.CEPI. UCSP.2022) for the research project entitled: Multidimensional study of violence against women in the city from Arequipa, 2022.

3. Results

A descriptive analysis of the sociodemographic variables of the selected women was carried out (Table 1), finding the following information: According to life stage, 45.8% were young women, and 54.2% were adult women; mean age was 33.96 years with a standard deviation of 9.88 years; women live in urban areas (87 percent) and rural areas (13 percent); According to the level of education, 11.8% had primary education, 47.1% had secondary level and 41.2% had higher education, and 30.4% of women were unemployed, 39% were self-employed and 30.6% were dependent.
Table 1. Descriptive analysis of sociodemographic variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>f(x)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Stage</td>
<td>Young</td>
<td>717</td>
<td>45.8%</td>
</tr>
<tr>
<td></td>
<td>Adult</td>
<td>848</td>
<td>54.2%</td>
</tr>
<tr>
<td>Area of residence</td>
<td>Urban</td>
<td>1370</td>
<td>87.0%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>195</td>
<td>13.0%</td>
</tr>
<tr>
<td>Degree of education</td>
<td>Primary</td>
<td>184</td>
<td>11.8%</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>737</td>
<td>47.1%</td>
</tr>
<tr>
<td></td>
<td>Superior</td>
<td>644</td>
<td>41.2%</td>
</tr>
<tr>
<td>Occupation</td>
<td>Unemployed</td>
<td>476</td>
<td>30.4%</td>
</tr>
<tr>
<td></td>
<td>Independent</td>
<td>610</td>
<td>39.0%</td>
</tr>
<tr>
<td></td>
<td>Dependent</td>
<td>479</td>
<td>30.6%</td>
</tr>
</tbody>
</table>

Note: fx = frequency; %= percentage.

Table 2, the levels of violence suffered by women were calculated to estimate the general of violence level, finding a moderate level (54.1%) with a tendency to rise (33.7%), measurements that indicate that women have gone through a significant event of violence, in addition, both emotional, physical and sexual violence present similar levels, demonstrating that most of the women who suffered emotional violence also suffered physical and sexual violence from couples or ex-couples.

Table 2. Violence against women index.

<table>
<thead>
<tr>
<th>Level Variables</th>
<th>Slight</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f(x) (%)</td>
<td>f(x) (%)</td>
<td>F(x) (%)</td>
</tr>
<tr>
<td>General index</td>
<td>191 (12.2%)</td>
<td>846 (54.1%)</td>
<td>528 (33.7%)</td>
</tr>
<tr>
<td>Emotional violence</td>
<td>239 (15.3%)</td>
<td>1054 (67.3%)</td>
<td>443 (28.3%)</td>
</tr>
<tr>
<td>Physical and sexual</td>
<td>68 (4.3%)</td>
<td>827 (67.8%)</td>
<td>343 (28.1%)</td>
</tr>
</tbody>
</table>

Note: fx = frequency; %= percentage.

Table 3, two independent groups were compared with the results of the violence against women index. For the variable stage of life, sufficient statistical significance was found (p < 0.05) to differentiate those adult women who present the highest rates of violence, both emotional, physical, and sexual, compared to young women. Small effect size.

Table 3. Comparison of violence against women index by life stage.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Young</th>
<th>Adult</th>
<th>Statistical test</th>
<th>rbis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average range (n = 717)</td>
<td>Average range (n = 848)</td>
<td>U</td>
<td>p</td>
</tr>
<tr>
<td>General index</td>
<td>741.75</td>
<td>817.88</td>
<td>274,430</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotional violence</td>
<td>734.17</td>
<td>824.29</td>
<td>268,998</td>
<td>0.000</td>
</tr>
<tr>
<td>Physical and sexual</td>
<td>768.49</td>
<td>795.27</td>
<td>273,602</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note: n = sample size; M = Mean; U = Mann Whitney’s U; P = significance (0.05); rbis = biserial correlation (effect size).

However, in Table 4, no statistically significant differences were found for the area of residence variable. Therefore, the violence variable according to the location of the residence does not distinguish the vulnerability of women being potential victims by their couples or ex-couples.
Table 4. Comparison of violence against women index by area of residence.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Urban Average range (n = 1370)</th>
<th>Rural Average range (n = 195)</th>
<th>Statistical test</th>
<th>rbis</th>
</tr>
</thead>
<tbody>
<tr>
<td>General index</td>
<td>789.57</td>
<td>736.87</td>
<td>124,580.5</td>
<td>0.128</td>
</tr>
<tr>
<td>Emotional violence</td>
<td>789.41</td>
<td>737.99</td>
<td>124,797.5</td>
<td>0.137</td>
</tr>
<tr>
<td>Physical and sexual violence</td>
<td>788.90</td>
<td>741.55</td>
<td>125,493.0</td>
<td>0.168</td>
</tr>
</tbody>
</table>

Note: n = sample size; M = Mean; U = Mann Whitney’s U; P = significance (0.05); rbis = biserial correlation (effect size).

Table 5. Comparison of the index of violence against women by education.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Primary Average range (n = 184)</th>
<th>High school Average range (n = 737)</th>
<th>Superior Average range (n = 644)</th>
<th>Statistical test</th>
<th>ε²</th>
</tr>
</thead>
<tbody>
<tr>
<td>General index</td>
<td>925.17</td>
<td>845.33</td>
<td>671.05</td>
<td>71.767</td>
<td>0.000 0.05</td>
</tr>
<tr>
<td>Emotional violence</td>
<td>927.29</td>
<td>848.42</td>
<td>66.91</td>
<td>76.727</td>
<td>0.000 0.05</td>
</tr>
<tr>
<td>Physical and sexual violence</td>
<td>907.13</td>
<td>828.57</td>
<td>695.38</td>
<td>76.306</td>
<td>0.000 0.03</td>
</tr>
</tbody>
</table>

Note: N = sample; H = Kruskal Wallis statistician; p = significance (0.05); ε² = epsilon squared (effect size).

Table 6. Comparison of the index of violence against women by occupation.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unemployed Average range (n = 476)</th>
<th>Independent Average range (n = 610)</th>
<th>Dependent Average range (n = 479)</th>
<th>Statistical test</th>
<th>ε²</th>
</tr>
</thead>
<tbody>
<tr>
<td>General index</td>
<td>791.27</td>
<td>784.81</td>
<td>772.47</td>
<td>0.429</td>
<td>0.807 2.75</td>
</tr>
<tr>
<td>Emotional violence</td>
<td>798.45</td>
<td>781.38</td>
<td>769.71</td>
<td>0.979</td>
<td>0.613 6.26</td>
</tr>
<tr>
<td>Physical and sexual violence</td>
<td>764.10</td>
<td>798.27</td>
<td>782.33</td>
<td>1.555</td>
<td>0.460 9.94</td>
</tr>
</tbody>
</table>

Note: N = sample; H = Kruskal Wallis statistician; p = significance (0.05); ε² = epsilon squared (effect size).

4. Discussion

The objective of this study was to measure the violence against women index in Peru according to sociodemographic variables to compare in which groups the violence with the most significant impact may occur, according to the results, when calculating the levels of violence suffered by women to estimate the general index of violence, a moderate level (54.1%) was found with an upward trend (33.7%) measurements that indicate that women have gone through a significant violent event. In addition, emotional, physical, and sexual violence present similar levels, showing that most women who suffered emotional violence also suffered physical and sexual violence by their couples or ex-couples, observing that women are exposed to severe or profound violence, as pointed out[13,16].

These results find some similarity with those found by the demographic and family health survey of the National Institute of Statistics and Informatics[4], where the highest prevalence of violence was found in psychological violence (insults, slander, shouting, insults, mockery, humiliations among the most prominent)
with 50.1%; Likewise, 27.1% reported that they were victims of physical violence and 6% sexual violence by their husband or partner (pushing, hitting, kicking, threatening with a knife, gun, having sexual relations without their consent or performing sexual acts not approved by the woman). Furthermore, 66.3% of women who had ever been together (married, cohabiting, divorced, separated or widowed) stated that their husband, partner or partner exercised some form of control over them; 21.7% reported that they had been threatened by their husband or partner with leaving the house, taking away their children or withdrawing financial aid, situations that put women at a disadvantage compared to men, making them more vulnerable and increasing the level of being exposed to severe violence.

In this sense, the high probability that women will suffer severe violence is due to the excessive increase in violence, where the attempt is a behavior to harm the woman, which includes aggression with firearms and sharp weapons, attempting to hang or burn. For the victim, this situation leads to the understanding that cases of severe violence are synonymous with attempted feminicide and have a high impact on the behavior of the aggressor, as pointed out by Méndez and his collaborators[23].

When comparing the results of the index of violence against women according to sociodemographic variables included in the study, relevant aspects were found. According to the stage of life, it is adult women who are more exposed to serious or severe violence compared to younger women, considering that adult women maintain a relationship allowed by the level of family commitment they assume, in addition, economic, emotional, and social dependence can predict high levels of violence, exposing adult women to this challenging situation[24]. However, in the young population this phenomenon has been emerging quite strongly, especially in those aged 16 to 24 years, who stated that they had suffered some type of violence during their lives[25], finding a high prevalence, where the psychological violence.

Similarly, another sociodemographic data for comparison is the educational level, finding that the lower the academic level, the higher the probability of suffering severe violence. In this sense, Durán[26] explained that the more educated a woman is, the more empowered she will be. The more inequality gaps in the couple’s relationship will balance power, acting as a protective barrier for women, when a woman is more educated, there is a high probability of entering the labor market, decreasing dependence on her couples, especially in the economic and emotional aspects. On the contrary, women with less education, married or cohabiting, may suffer more violence, because women with these characteristics behave traditionally in their gender roles, where the predominance of power is developed by the man[23].

Concerning the variable area of residence, it was found that there are no differences in the results if the women reside in a particular area, understanding that the presence of violence against women occurs more frequently in sexist societies, where alcohol consumption is abused, low couple communication, loss of family values, infidelity, economic stress, which are indicators that show that women can potentially be victims in a family environment with these characteristics and that they can be in both urban and rural areas[7,11]. Data that contradicts those found by Barja-Ore and others[27], who indicated that violence against women is more frequent in urban areas than in rural areas; also, Hidalgo-Calló and collaborators[28] specified the presence of violence in rural areas as a very prevalent problem that affects almost half of the women who are in a relationship, with psychological violence predominating compared to sexual violence.

For this reason, it is ratified that violence, in general, has currently been conceived as an ordinary situation that occurs daily in Peruvian homes and that this situation is not distinguished by age, religion, race, area of residence, educational level, economic status, because it can occur in any family, workplace, placing women as the principal victims of suffering or suffering any form or type of violence, mild or severe; what is critical and reprehensible about this social problem is when it goes to the extreme of murdering women[12,13].
Therefore, although our findings in many cases are very similar to other studies, it is necessary to understand that current behavior can help predict the high level of severe violence if it is not attended to in a timely manner.

According to our analysis, it is necessary to continue studying this problem with a more interdisciplinary vision to understand the other types of violence to which women may be exposed in larger samples that integrate a more significant number of regions or contexts from Peru.

Besides, these results must be taken into account by political, judicial and legislative authorities, with the aim of improving laws and strategies that protect the integrity of women. Likewise, professionals in charge of intervening in these matters from educational, prevention and health institutions, must strengthen violence care programs for both victims and aggressors, using therapeutic tools that contribute to properly treating this problem to try to reduce it. The high rates found.

Finally, during the research process, some limitations emerged, the main one being the research design used, which was cross-sectional and did not allow for more rigorous analyses. Also, the low participation of women when talking about violence was observed, deciding not to participate in the study due to fear and lack of confidence in the protection of information.

5. Conclusions

A moderate level of violence against women was found, with a tendency to increase severely (significant indices). Therefore, violence does not distinguish women from victims due to their social, family, economic, educational, cultural, or residence status. However, there is a greater probability of severe violence in adult women with a low level of education.

The results of this investigation should be taken into account so that the political and judicial authorities can strengthen protection measures to establish security and process complaints made both in the National Police and in the Public Prosecutor’s Office.

The education and health sectors must implement programs for peaceful coexistence, periodically carry out awareness campaigns so that families understand the real dimension of this problem and seek specialized attention to reduce the high rates of violence.

Author contributions

Conceptualization, JCL and YAV; methodology, MLM; software, TYF; validation, YAA, AMV and MLM; formal analysis, AMV; investigation, JCL; resources, YAV; data curation, HPP; writing—original draft preparation, JCL; writing—review and editing, HPP and AMV; visualization, TYF; supervision, YAA; project administration, JCL; funding acquisition, MLM. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

References


17. Ferreyra G. Scale on the index of abuse against women. (n.d.).


