



FACTORS ASSOCIATED WITH INTRAFAMILY VIOLENCE IN PREGNANT WOMEN AT A PERUVIAN MOTHER-CHILD CENTER

FACTORES ASOCIADOS A VIOLENCIA INTRAFAMILIAR EN GESTANTES DE UN CENTRO MATERNO INFANTIL EN PERÚ

Gretty Bejarano-Gaston ¹, Luis Roldan-Arbieto ², Manuel Loayza-Alarico ^{2,3}, Pedro Arango-Ochante ^{2,4}

ABSTRACT

Introduction: Domestic violence in pregnant women is considered a serious public health problem that affects the well-being of the mother and child. **Objective:** To determine the factors associated with intrafamily violence in pregnant women at the Tablada de Lurín Maternal and Child Center during the period 2021-2022. **Methods:** Analytical cross-sectional study. The clinical histories of a first level health center were used. The main variable was domestic violence; the independent variables were demographic and social characteristics, number of children and previous illness. **Results:** Domestic violence occurred in 15.63%. In the first simple regression analysis, it was found that pregnant women with more than 4 children, with a confidence interval of 2.44, presented a higher frequency of suffering intrafamily violence compared to pregnant women who had less than or equal to 2 children. In the second multiple regression analysis, it was observed that pregnant women with more than 4 children presented a higher frequency of suffering intrafamily violence compared to pregnant women who had less than or equal to 2 children. **Conclusions:** It was found that pregnant women who suffered family violence represented 15.6%. Those who had more than four children were more likely to suffer domestic violence than women with less than two children; the average age of the raped pregnant women was 29.9 years.

Keywords: Domestic Violence; Pregnant; Risk factors. (Source: MESH-NLM)

RESUMEN

Introducción: La violencia intrafamiliar en las gestantes se considera un grave problema de salud pública que afecta el bienestar de la madre y el hijo. **Objetivo:** Determinar los factores asociados a la violencia intrafamiliar en gestantes del Centro Materno Infantil Tablada de Lurín en el periodo 2021-2022. **Métodos:** Estudio transversal analítico. La población de estudio son las gestantes del Centro Materno Infantil Tablada de Lurín. **Resultados:** La violencia intrafamiliar se presentó en un 15.63 %. Se identificó que las gestantes con más de cuatro hijos presentaron mayor frecuencia de sufrir violencia intrafamiliar en comparación con las que tenían menor o igual a dos hijos (RP= 3.63; IC95 %: 2.44-5.39). La edad de las gestantes violentadas fue de 29.9 años; esto es significativo en el análisis bivariado con un RP de 1.99 (IC95 %: 1.005-2.038). **Conclusiones:** Se encontró que las gestantes que sufrieron violencia familiar representaron un 15.6 %. Las que tenían más de cuatro hijos tuvieron mayor frecuencia de sufrir violencia intrafamiliar a diferencia de las mujeres con menos de dos hijos; la edad promedio de las gestantes violentadas fue de 29.9 años.

Palabras clave: Violencia doméstica; Embarazadas; Factores de riesgo. (Fuente: DeCS- BIREME)

¹ Faculty of Human Medicine, Universidad Ricardo Palma, Lima, Peru.

² Instituto de Investigaciones en Ciencias Biomédicas, (INICIB). Faculty of Human Medicine, Universidad Ricardo Palma, Lima, Peru.

³ MD, Epidemiologist, Public Health Specialist.

⁴ MD, Obstetrician-Gynecologist, Hospital de Vitarte.

Cite as: Bejarano-Gaston G, Roldan-Arbieto L, Loayza-Alarico M, Arango-Ochante P. Factors associated with intrafamily violence in pregnant women at a Peruvian mother-child center. Rev Fac Med Hum. 2024;24(4):106-111. [doi:10.25176/RFMH.v24i4.6455](https://doi.org/10.25176/RFMH.v24i4.6455)

Journal home page: <http://revistas.urp.edu.pe/index.php/RFMH>

Article published by the Journal of the Faculty of Human Medicine of the Ricardo Palma University. It is an open access article, distributed under the terms of the Creative Commons License: Creative Commons Attribution 4.0 International, CC BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>), which allows non-commercial use, distribution and reproduction in any medium, provided that the original work is duly cited. For commercial use, please contact revista.medicina@urp.edu.pe



INTRODUCTION

Domestic violence during pregnancy is considered a serious public health issue that affects the well-being of both mother and child. It encompasses physical, sexual, and/or emotional violence, which can lead to mental, sexual, physical health problems, among others, and may result in femicide⁽¹⁾.

Globally, according to the World Health Organization (WHO), one in three women has experienced physical or sexual violence from their partner. Similar figures are reported in the Americas, reaching up to 29.8%⁽²⁾. A 2013 meta-analysis, which reviewed 92 independent studies in 23 countries worldwide, revealed that the prevalence of violence during pregnancy is 19.8%⁽³⁾. In Peru, 22.5% of women are affected by violence, particularly those with an average age of 35, separated, with a lower educational level than their partner, and a lower wealth index⁽⁴⁾.

In Peru, according to the Instituto Nacional de Estadística e Informática (INEI), in 2017, nearly a third of women experienced physical violence; the most common forms were pushing or throwing objects (26%), slapping (18.2%), and punching (15.3%)^(4,5). The consequences include health problems for children and economic strain on families, which also impacts society and the community⁽⁶⁾. A 2022 study of pregnant women in Brazil found that violence was more common among women aged 20 to 29, with black or brown physical characteristics, incomplete primary education, and single civil status⁽⁷⁾.

Violence during pregnancy affects the unborn child by interfering with normal development, leading to low birth weight, vaginal bleeding, premature birth, and postpartum depression; all of this is due to stress or anxiety during gestation⁽⁸⁾. Added to this are the behavioral and emotional disorders that children may develop growing up in a violent family environment⁽⁹⁾. Finally, a multidisciplinary approach is required, with support from the Ministry of Women and Vulnerable Populations, as well as the engagement and commitment of other institutions such as the Judiciary, Public Ministry, and Ministry of Health, so that primary

care personnel receive training, as they have the opportunity to detect and address violence at a crucial time: pregnancy⁽¹⁰⁾.

METHODS

Study Design

This article is an observational, analytical, cross-sectional, and retrospective study.

Study Population

The study universe consisted of the medical records of pregnant women from the Tablada de Lurín Maternal and Child Health Center in Lima during the period from 2020 to 2021. With a 95% confidence interval and 80% statistical power, matching two controls for each case, the final sample consisted of 659 pregnant patients who were randomly selected.

Main Research Variables

Independent variable (IV): Age, marital status, educational level, number of children, previous illness.

Dependent variable (DV): Domestic violence (no/yes).

Data Analysis Techniques

The analysis was performed using STATA v17.0 software. For the descriptive analysis, qualitative variables were summarized in proportions, and quantitative variables were presented as means and standard deviations. To measure the association of risk factors, crude prevalence ratios (PR) and adjusted prevalence ratios (aPR) were estimated using a Poisson regression model with robust variances. A 95% confidence level was used.

RESULTS

The final sample consisted of 659 pregnant women. The mean age was 27.95 years, with most being 18 years or older (96.05%). The predominant marital status was single motherhood (69.95%). A total of 80.42% had basic education, 15.02% had technical education, and only 4.55% had higher education. Pregnant women with more than four children accounted for 12.29%, and those with a previous illness were 10.17%. Domestic violence accounted for a total of 15.63% (Table 1).

**Table 1.** Sociodemographic characteristics of a sample of pregnant women.

| Characteristics | n | % |
|-----------------------------|-----------------------------|--------------|
| Age | (average = 27.95, s = 6.65) | |
| 18 years and older | 606 | 92.0 |
| Younger than 18 years | 53 | 8.0 |
| Marital status | | |
| Single | 461 | 70.0 |
| Cohabitant | 137 | 20.8 |
| Married | 61 | 9.3 |
| Level of education | | |
| Primary | 32 | 4.9 |
| Secondary | 388 | 58.9 |
| Technical higher education | 176 | 26.7 |
| University higher education | 63 | 9.6 |
| Number of children | (average = 2.79, s = 0.42) | |
| <= 2 | 320 | 48.6 |
| 3 to 4 | 258 | 39.2 |
| > 4 | 81 | 12.3 |
| Previous illness | | |
| No | 592 | 89.8 |
| Yes | 67 | 10.2 |
| Domestic violence | | |
| No | 556 | 84.4 |
| Yes | 103 | 15.6 |
| Total | 659 | 100.0 |

It was observed that pregnant women who had experienced domestic violence had a higher average age of 29.29 years compared to the average age (27.69 years) of those who did not experience domestic violence. Pregnant women with more than four children had a 30.42% higher exposure to domestic violence compared to mothers with two or fewer children (41.98 vs. 11.56; $p < 0.001$) (Table 2).

In the bivariate analysis, it was found that pregnant women with more than four children had a 263% higher frequency of suffering domestic violence compared to those with two or fewer children ($PR = 3.63$; 95% CI: 2.44-5.39).

Similarly, the highest percentage of abused pregnant women were those aged 30 years or younger, with an average age of 29.29 years ($PR = 1.99$; 95% CI: 1.005-2.008).

In the multivariate analysis, the observed association remained in terms of direction and magnitude; it was found that pregnant women with more than four children had a 239% higher frequency of suffering domestic violence compared to those with two or fewer children ($aPR = 3.39$; 95% CI: 2.24-5.12). This was adjusted for confounding variables such as categorized age, marital status, education level, and previous illnesses (Table 2).

Table 2. Factors associated with domestic violence.

| Risk factors | Without domestic violence | | With domestic violence | | Análisis bivariado | | Análisis multivariado | | |
|---------------------------|---------------------------|------|------------------------|------|--------------------|---------------|-----------------------|---------------|--|
| | n | % | n | % | RP | IC 95% | RP _a | IC 95% | |
| Age | | | | | | | | | |
| 30 years or less | 511 | 84.3 | 95 | 15.7 | Ref | | Ref | | |
| Over 30 years | 45 | 84.9 | 8 | 15.1 | 1.99 | 1.005 - 2.038 | 0.94 | 0.625 - 1.415 | |
| Marital status | | | | | | | | | |
| Single | 338 | 84.2 | 73 | 15.8 | 0.88 | 0.494 - 1.560 | 0.78 | 0.439 - 1.398 | |
| Cohabitant | 118 | 86.1 | 19 | 13.9 | 0.77 | 0.390 - 1.516 | 0.75 | 0.390 - 1.428 | |
| Married | 50 | 82.0 | 11 | 18.0 | Ref | | | | |
| Level of education | | | | | | | | | |
| Primary | 26 | 81.3 | 6 | 18.8 | 1.45 | 0.654 - 3.193 | 1.20 | 0.574 - 2.529 | |
| Secondary | 322 | 83.0 | 66 | 17.0 | 1.31 | 0.883 - 1.947 | 1.13 | 0.762 - 1.675 | |
| Higher | 208 | 87.0 | 31 | 13.0 | Ref | | | | |
| Number of children | | | | | | | | | |
| ≤ 2 | 283 | 88.4 | 37 | 11.6 | Ref | | Ref | | |
| 3 to 4 | 226 | 87.6 | 32 | 12.4 | 1.07 | 0.688 - 1.672 | 1.07 | 0.665 - 1.716 | |
| > 4 | 47 | 58.0 | 34 | 42.0 | 3.63 | 2.44 - 5.398 | 3.60 | 2.217 - 5.832 | |
| Previous illness | | | | | | | | | |
| No | 504 | 85.1 | 88 | 14.9 | Ref | | Ref | | |
| Yes | 52 | 77.6 | 15 | 22.4 | 1.51 | 0.927 - 2.448 | 1.38 | 0.848 - 2.231 | |



DISCUSSION

The prevalence of domestic violence was 15.63%, which was not similar to the results of a study conducted on postpartum women treated at the Instituto Nacional Materno Perinatal (INMP) from July to December 2019, where the percentage of domestic violence was 29.44%⁽¹¹⁾. According to a systematic review that included 21 studies conducted in Latin America, the prevalence of violence among pregnant women varied widely, ranging from 3% to 44%. This may be due to the fact that pregnant women may hide their situation because of fears or threats from their partners; likewise, there is a lack of trained professionals to detect violence in this context^(12,13). Additionally, it was observed that women who experience violence often have difficulty recognizing it, as they tend to normalize it as something common in the patriarchal environment in which they are immersed⁽¹⁴⁾.

According to a study conducted among women of Chinese ethnicity, it was found that 44% of them experienced domestic violence⁽¹⁵⁾. In a study conducted in Peru, using the 2020 Demographic and Family Health Survey (ENDES, by its Spanish acronym), the prevalence was found to be 5.7%⁽¹⁶⁾. On the other hand, another study conducted among Peruvian women revealed that 29.44% experienced violence during pregnancy⁽¹⁷⁾.

In a systematic review that evaluated 60 longitudinal studies, it was found that the most important risk factor was unplanned pregnancy, which is reflected in the number of children, a finding that is consistent with our study, where it was observed that pregnant women with more than four children experienced domestic violence. Similarly, in our study, the percentage of pregnant women over 18 years old who were victims of

violence was 15.96%, with an average age of 29.29 years. This result is significant in the bivariate analysis, with a PR of 1.99 and a CI of 1.005-2.038, which is compatible with another study conducted in Peru in 2019, where the average age of abused pregnant women was 31.31 years. This highlights the importance of addressing this socioeconomic factor for the timely detection and prevention of violence. In our study, no association was found between marital status and the presence of domestic violence among pregnant women. This differs from findings in other studies: In a systematic review, it was concluded that being married is a protective factor against domestic violence in pregnant women⁽¹⁸⁻²⁰⁾.

It was concluded that 15.6% of pregnant women suffered domestic violence. Pregnant women with more than four children had a 239% higher frequency of suffering domestic violence compared to women with two or fewer children, regardless of maternal age, marital status, educational level, or the presence of pre-existing illnesses. It is recommended that future studies explore, prospectively, both quantitative and qualitative evaluations regarding the nature of each influencing factor. Additionally, a more detailed description of domestic violence and its types is needed so that preventive strategies and programs can be developed to counter domestic violence among pregnant women.

Acknowledgements

As the corresponding author, I would like to thank the support of my co-authors, as well as my undergraduate doctors for their constant guidance in the preparation of this article. I would also like to express my gratitude to the Tablada de Lurín Maternal and Child Health Center for allowing us access to the database, and finally, to my family.

Authorship contribution: All authors have accepted responsibility for the content of this article and its subsequent approval.

Funding: Self-funded.

Conflict of interest: The authors declare no conflicts of interest.

Received: April 02, 2024.

Approved: August 01, 2024.

Correspondence: Gretty Bejarano-Gaston.
Address: Calle Domingo Nieto Mz A It 31, Surco.
Telephone: 955305444
Email: bejaranogastong@gmail.com

REFERENCES

1. Organización Mundial de la Salud. Violencia contra la mujer [Internet]. [citado 6 de mayo de 2023]. Disponible en: <https://www.who.int/es/news-room/fact-sheets/detail/violence-against-women>
2. Organización Mundial de la Salud. OMS: 1 de cada 3 mujeres en el mundo sufrió violencia física y sexual por parte de su pareja [Internet]. [citado 6 de mayo de 2023]. Disponible en: <https://www.gob.pe/institucion/minsa/noticias/31085-oms-1-de-cada-3-mujeres-en-el-mundo-sufrio-violencia-fisica-y-sexual-por-parte-de-su-pareja>
3. James L, Brody D, Hamilton Z. Risk factors for domestic violence during pregnancy: a meta-analytic review. *Violence Vict.* 2013;28(3):359–80.
4. Canto YE, Montalvo YJO, Romani KJO, Gervasi GMD; Análisis ecológico de la violencia sexual de pareja en mujeres peruanas. *Acta Colomb Psicol* [Internet]. 1 de enero de 2020 [citado 6 de mayo de 2023];23(1):272–300. Disponible en: <https://actacolombianapsicologia.ucatolica.edu.co/article/view/3140>
5. Morales J, Basilio M, Candia-Zambrano 2 C; Violencia y autoestima en gestantes de un distrito del Callao. *Peruvian J Health Care Glob Health* [Internet]. 30 de diciembre de 2019 [citado 6 de mayo de 2023];3(2):75–80. Disponible en: <http://portal.amelica.org/amei/jatsRepo/579/5792504005/>
6. Medina-Quispe CI, QuispeYN, Linares A, Huaccho-Rojas J; Depresión y violencia conyugal en gestantes peruanas durante la pandemia por la COVID-19. *Rev Cuerpo Méd Hosp Nac Almazor Aguinaga Asenjo* [Internet]. 2022 [citado 6 de mayo de 2023];15(4). Disponible en: <http://www.cmhnaaa.org.pe/ojs/index.php/rcmhnaaa/article/view/1349>
7. Barzola Macha MK, Moquillaza Alcántara VH, Diaz Tinoco“+” CM, Barzola Macha MK, Moquillaza Alcántara VH, Diaz Tinoco“+” CM; Violencia doméstica durante el embarazo en un hospital especializado del Perú: Prevalencia y factores asociados. *Rev Chil Obstet Ginecol* [Internet]. diciembre de 2020 [citado 6 de mayo de 2023];85(6):641–53. Disponible en: http://www.scielo.cl/scielo.php?script=sci_abstract&pid=S0717-75262020000600641&lng=es&nrm=iso&tlng=es
8. Colonese CF, Pinto LW; Analysis of reports of violence against pregnant women in brazil in the period from 2011 to 2018. *Texto & contexto enferm* [Internet]. 2022 [citado el 29 de agosto de 2023];e20210180–e20210180. Disponible en: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072022000100324
9. Jiménez-Siles S, Oropesa-Ropero J; Detección de violencia de género en las consultas de embarazo. *Ene.* [Internet]. 2022 [citado 2023 Ago 24]; 16(1): 1265. Disponible en: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1988-348X2022000100006&lng=es.Epub19-Sep-2022
10. Generalitat de Catalunya. Departament de Salut. Protocol per l’abordatge de la violència masclista en l’àmbit de la salut a Catalunya. Disponible en: http://salutweb.gencat.cat/web/.content/home/ambits_tematicis/linies_dactua_cio/model_assistencial/ordenacio_cartera_i_serveis_sanitaris/abordatge_de_la_violencia_masclista/documents/arxiu/abord_embaras.pdf;2010 [citado 20 de marzo de 2024].
11. Vera Sánchez LJ, Alay Giler A, Vera Sánchez LJ, Alay Giler A; El maltrato en la familia como factor de riesgo de conducta antisocial en adolescentes. *Rev Cienc Humanísticas Soc ReHuSo* [Internet]. abril de 2021 [citado 6 de mayo de 2023];6(1):23–40. Disponible en: http://scielo.senescyt.gob.ec/scielo.php?script=sci_abstract&pid=S2550-65872021000100023&lng=es&nrm=iso&tlng=es
12. Habib S, Abbasi N, Khan B, Danish N, Nazir Q; Domestic Violence Among Pregnant Women. *J Ayub Med Coll Abbottabad JAMC.* 2018;30(2):237–40. Disponible en: <https://pubmed.ncbi.nlm.nih.gov/29938426/>
13. López Burga J, Nuñez Guevara R; Factores asociados a violencia doméstica durante el embarazo, en establecimiento de salud de la microred José Leonardo Ortiz, Agosto-Diciembre 2017. Disponible en: <https://repositorio.unprg.edu.pe/bitstream/handle/20.500.12893/3795/BC-TES-TMP-2603.pdf?sequence=1&isAllowed=y>
14. Gómez-Fernández MA, Goberna-Tricas J, Payá-Sánchez M; The experiential expertise of primary care midwives in the detection of gender violence during pregnancy. *Qualitative study.* *Enferm Clinica Engl Ed.* 1 de noviembre de 2019;29(6):344–51. Disponible en: <https://pubmed.ncbi.nlm.nih.gov/31416789/>
15. Stumbar S, Ward-Peterson M, Lupi C. A; Pilot Project Exploring Medical Students' Barriers to Screening for Intimate Partner Violence and Reproductive Coercion. *PRIMER* [Internet]. 2019 [citado 8 de mayo de 2023];3. Disponible en: <https://journals.stfm.org/primer/2019/stumbar-2019-0012/>
16. Lainez Valiente NG, Martínez Guerra GDLA, Portillo Najarro DA, Alvarenga Menéndez AF, Véliz Flores AM; Consecuencias físicas y psicológicas de la violencia obstétrica en países de Latinoamérica. *Alerta Rev Científica Inst Nac Salud.* 30 de enero de 2023;6(1):70–7. Disponible en: <https://docs.bvsalud.org/biblioref/2023/02/1413706/violencia-obstetrica.pdf>
17. Herrera F, Aguayo F, Goldsmith Weil J, Herrera F, Aguayo F, Goldsmith Weil J; Proveer, cuidar y criar: evidencias, discursos y experiencias sobre paternidad en América Latina. *Polis Santiago.* agosto de 2018;17(50):5–20. Disponible en: <https://www.scielo.cl/pdf/polis/v17n50/0718-6568-polis-17-50-00005.pdf>
18. Sánchez M; Asociación entre la violencia intrafamiliar y el embarazo adolescente en el Perú: Análisis secundario de ENDES 2020. Disponible en: <https://repositorio.upsjb.edu.pe/handle/20.500.14308/3796>
19. Yakubovich AR, Stöckl H, Murray J, Melendez-Torres GJ, Steinert JI, Glavin CEY, et al; Risk and Protective Factors for Intimate Partner Violence Against Women: Systematic Review and Meta-analyses of Prospective–Longitudinal Studies. *Am J Public Health.* julio de 2018;108(7):e1. Disponible en: <https://pubmed.ncbi.nlm.nih.gov/29771615/>
20. Merino Sánchez L; Asociación entre la violencia intrafamiliar y el embarazo adolescente en el Perú: análisis secundario de ENDES 2020 [Internet] [Médico cirujano]. [Lima]: Universidad Privada San Juan Bautista; 2022 [citado 22 de agosto de 2023]. Disponible en: <https://repositorio.upsjb.edu.pe/handle/20.500.14308/3796>