Trends in reported feminicides and attempted feminicides in Brazil, 2015 to 2025

Miriane Lucindo Zucoloto, Elisângela Aparecida da Silva Lizzi, Emanuele Candida Moreira, Edson Zangiacomi Martinez

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Original article

Trends in reported feminicides and attempted feminicides in Brazil, 2015 to 2025

Tendências nos casos reportados de feminicídio e tentativas de feminicídio no Brasil, 2015 a 2025

Short title: Reports of feminicide in Brazil

Miriane Lucindo Zucoloto[I], Elisângela Aparecida da Silva Lizzi[II], Emanuele Candida Moreira[III], Edson Zangiacomi Martinez[IV]

I. Universidade de São Paulo, Faculdade de Medicina de Ribeirão Preto – Ribeirão Preto (SP), Brazil. E-mail: mirianezucoloto@gmail.com. ORCID: https://orcid.org/0000-0002-4745-227X

II. Universidade Tecnológica Federal do Paraná – Cornélio Procópio (PR), Brazil. E-mail: elisangelalizzi@gmail.com. ORCID: https://orcid.org/0000-0001-7064-263X

III. Universidade de São Paulo, Faculdade de Medicina de Ribeirão Preto – Ribeirão Preto (SP), Brazil. E-mail: emanuele12moreira@gmail.com. ORCID: https://orcid.org/0009-0000-1546-1422

IV. Universidade de São Paulo, Faculdade de Medicina de Ribeirão Preto – Ribeirão Preto (SP), Brazil. E-mail: edson@fmrp.usp.br. ORCID: https://orcid.org/0000-0002-0949-3222

Corresponding author: Edson Zangiacomi Martinez, Universidade de São Paulo, Faculdade de Medicina de Ribeirão Preto, Av. Bandeirantes 3900 – CEP: 14049-900 – Ribeirão Preto (SP), Brazil. E-mail: edson@fmrp.usp.br.

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Approval by Research Ethics Committee: This study analyses aggregated data from a public health information system and does not identify individuals. Therefore, approval by a Research Ethics Committee is not required.

ABSTRACT: ***Objective***: To describe the trend in the monthly number of reported feminicides and attempted feminicides in Brazil between 2015 and 2025. ***Methods***: Trends and potential change points in these time series were identified using the Bayesian Estimator of Abrupt Change, Seasonality, and Trend (BEAST) model. Data were obtained from SINESP (the National Public Security Information System), based on police reports recorded by Brazilian Civil Police forces. ***Results***: A total of 13,611 reported feminicides and 21,511 reported attempted feminicides were recorded during the study period. The BEAST model identified two distinct periods in the monthly feminicide time series, with a sharp increase from January 2015 to April 2020, followed by a slower rise. Four significant change points were identified in the attempted feminicide data series, which was characterized by alternating periods of growth and stability. ***Conclusion*****:** An apparent stabilization of feminicide reports may reflect institutional limitations in reporting systems, rather than true reductions in violence. The change points in attempted feminicides series may correspond to key legal milestones, suggesting that recorded trends often reflect reporting capacity and legal changes rather than pure incidence rates. While public policies have improved case classification, they focus more

on damage control than on transforming patriarchal structures, highlighting the need for new approaches and better institutional capacity to reduce victim invisibility.

Keywords: Violence against women. Gender-based violence. Brazil. Homicide. Public health surveillance.

RESUMO: ***Objetivo***: Este estudo ecológico descreveu a tendência do número mensal de feminicídios e tentativas de feminicídio reportados no Brasil entre 2015 e 2025. ***Métodos***: Pontos de possíveis mudanças nessas séries temporais foram identificados utilizando o modelo BEAST (*Bayesian Estimator of Abrupt Change, Seasonality, and Trend*). Foram utilizados dados do SINESP (Sistema Nacional de Informações sobre Segurança Pública), com base em boletins de ocorrência registrados pela Polícia Civil. ***Resultados***: Um total de 13.611 casos de feminicídio e 21.511 tentativas de feminicídio foram registrados durante o período do estudo. O modelo estatístico identificou dois períodos distintos na série temporal mensal de feminicídios, com um aumento acentuado de janeiro de 2015 a abril de 2020, seguido por um aumento mais lento. Quatro pontos de mudança significativos foram identificados na série de dados de tentativas de feminicídio. ***Conclusão***: Uma aparente estabilização no número de casos de feminicídio pode refletir limitações institucionais, já que as unidades federativas do Brasil apresentam capacidades desiguais para o relato de dados, o que significa que os patamares podem mascarar subnotificações em vez de reduções reais na violência. Os pontos de mudança na série de tentativas de feminicídio podem corresponder a marcos jurídicos importantes, sugerindo que as tendências registradas frequentemente refletem a capacidade de notificação e mudanças legais, em vez de taxas de incidência puras. Embora as políticas públicas tenham melhorado a classificação dos casos, elas se concentram mais no controle de danos do que na transformação das estruturas patriarcais, destacando a necessidade de

novas abordagens e melhor capacidade institucional para reduzir a invisibilidade das vítimas.

Palavras-chave: Violência contra a mulher. Violência de gênero. Brasil. Homicídio. Vigilância em saúde pública.

Introduction

According to Campos [1] the terms ‘femicide’ and ‘feminicide’ emerged from feminist theory and are refer to forms of gender-based violence rooted in misogyny and gender inequality. The concept of femicide is generally attributed to Diana Russell, who introduced the term in 1976 to describe the killing of women by men simply because they are women, offering a feminist alternative to the gender-neutral term ‘homicide’, which obscures the gendered nature of such killings. Since its introduction, the concept has evolved beyond a mere linguistic critique, becoming increasingly associated with systematic patterns of violence sustained by patriarchal structures and unequal power relations within societies. According to Souza [3], the term 'femicide' gained broader recognition during the 1990s, when Caputi and Russell [4] defined it as the murder of women by men, motivated by hatred, contempt, pleasure, or a sense of ownership. Within this framework, femicide is understood as the most extreme manifestation of a continuum of violence against women, occurring when forms of gender-based violence, such as rape, incest, physical and emotional abuse, sexual harassment, pornography, sexual exploitation, forced sterilization and forced motherhood, culminate in the death of the victim.

According to Campos, the term 'feminicide' introduces an explicit political dimension to the concept of femicide. Drawing on the contributions of the Mexican anthropologist

Marcela Lagarde, the term is used to describe killing of women in contexts characterized by impunity, institutional failure, and state complicity [1,2]. Therefore, feminicide is understood not only as a crime motivated by gender and misogyny, but also because of the state's failure to implement effective policies to combat violence against women. In this perspective, the killing of women occurs within a broader context of impunity, in which men occupy ~~in~~ positions of sexual, legal, social, economic, political and ideological power [3].

In March 2015, Brazil enacted Law 13.104, which amended the Penal Code to include feminicide as a qualifying circumstance of homicide and contributed to the popularization the term. For the first time in the country's history, this legal shift created a formal process for the police to investigate feminicide and gender-based violence [5].

Despite these legislative advances, Brazil remains one of the most violent countries for women [6,7]. Between 2014 and 2016, women exposed to violence in Brazil ~~who were exposed to violence~~ were estimated to be 8.3 times more likely to die than women in the general population. During this period, approximately 100 women died each week as a direct or indirect consequence of violence [8]. According to the Violence Atlas 2026, published by the Institute for Applied Economic Research (IPEA) and based on official data, between 2014 and 2024, 46,336 women were murdered in Brazil [9]. In 2024 alone, 3,642 women were victims of homicide, equating to a rate of 3.4 per 100,000 female inhabitants [9]. However, not all homicides of women meet the criteria for classification as femicide [10]. Distinguishing gender-related killings from other forms of female homicide is therefore essential for advancing knowledge about the magnitude, characteristics, and determinants of this phenomenon.

Thus, the objectives of this article are as follows: (a) to describe the trend in the monthly number of reported feminicide in Brazil between 2015 and 2025, using data from the

Ministry of Justice and Public Security's National System for Public Security, Prison, Weapons and Ammunition Traceability, Genetic Material, Fingerprint and Drug Information (SINESP); and (b) to describe the trend in the monthly number of reported attempted feminicide in Brazil over the same period, using the same data source.

Methods

Study design and data source

This ecological and descriptive study is based on data from SINESP (the National Public Security Information System), based on police reports filed by civil police forces. It considers the monthly number of reported feminicide and attempted feminicide in Brazil, from 2015 to 2025, categorizing the cases according to place of occurrence. Since 2015, SINESP has used a system designed to consolidate data and information from multiple sources of all Brazilian federal units into a single national database. Thus, the period from 2015 to 2025 was chosen based on the availability of consolidated data and the fact that it is long enough to make inferences. SINESP defines feminicide as the murder of a woman on the grounds of her gender, in accordance with article 121, paragraph 2, of the Brazilian Penal Code. As this study used secondary data and no individuals were identified, it was not submitted to a research ethics committee.

Although SINESP has provided data on intentional violent deaths since 2015, reporting of deaths resulting from police intervention only became mandatory for Brazilian federal units in 2020. Consequently, mortality indicators derived from SINESP data for the period prior to 2020 should be interpreted with caution, as incomplete reporting by some federal units may have led to underestimation of deaths from this cause [9].

Statistical analysis

To investigate the temporal dynamics of the monthly number of reported feminicide and attempted feminicide, it was used the Bayesian Estimator of Abrupt Change, Seasonal Change and Trend (BEAST) [11]. This method is useful for decomposing univariate time series and detecting abrupt changes. It has been used in various research areas, including analyzing female homicides over time [12]. The authors of the BEAST algorithm define 'abrupt' as 'any turning or break points at which the trend or seasonal signals deviate from their previous regular trajectories' [11]. Therefore, the approach computes the probability distribution of the number of change points in the trend component, as well as the probability of a change point occurring in each year of the research period (denoted by cpPr). The ideal number of change points is represented by the distribution's mode. Further information can be found in the original article by Zhao et al. [11].

For estimating the unknown parameters, the Bayesian approach is considered, where the Markov Chain Monte Carlo (MCMC) sampling technique is employed to obtain random samples for posterior inference. Three MCMC chains were simulated, each with 100,000 samples. The first 1,000 samples from each chain were discarded to avoid the effect of the initial values. This analysis has been performed on R (version 4.4.1) using the “Rbeast” package.

In the time series intervals in which the BEAST model suggests an approximately linear trend, it is possible to calculate the monthly percentage change (MPC). This measure is sometimes referred to as month-over-month percentage change, defined by MPC = [(value in current month – value in previous month) / value in previous month] x 100%. Considering the autocorrelation between successive observations in the data, MPC can be calculated using a Prais-Winsten regression model [12]. This analysis used the “prais” package in R.

Results

A total of 13,611 feminicide cases were reported between January 2015 and December 2025. The BEAST model divided the monthly feminicide data into two periods, both of which saw a significant increase in reported cases (Figure 1 and Table 1). During the first period (January 2015 to March 2020), there was an increase from 47 to 125 cases per month, representing a monthly percentage change (MPC) of 1.76%. From April 2020 onwards, however, a slower rate of increase was observed, with MPC of 0.29%. The presence of seasonal factors was not considered, since they were not detected in the BEAST analysis.

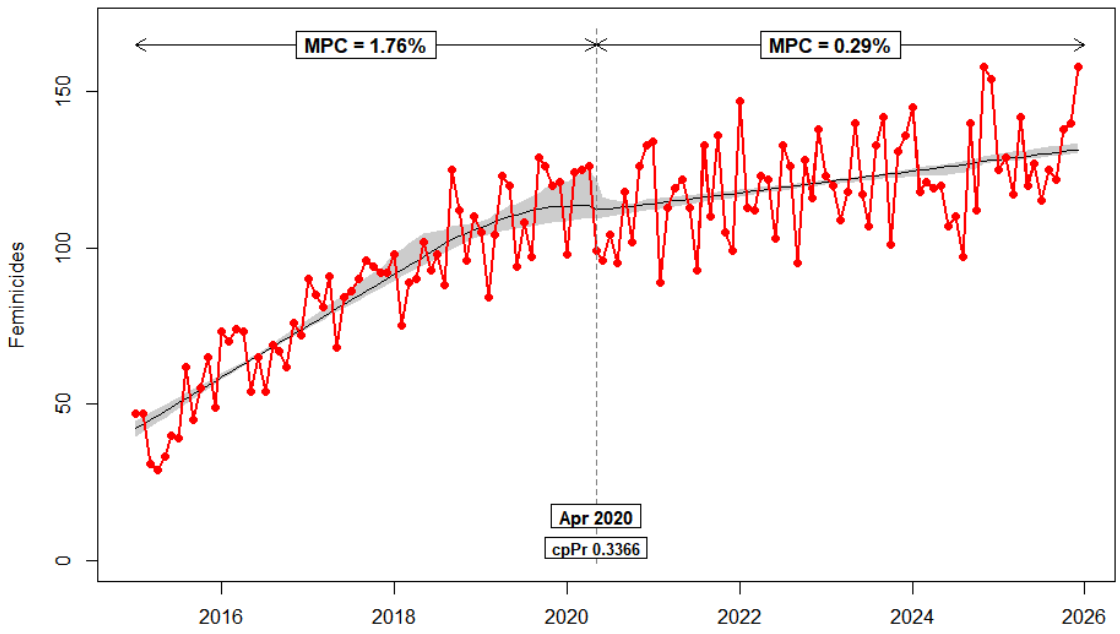

Figure 1. The red line shows the number of reported cases of feminicides in Brazil from January 2015 to December 2025. The black line shows the trend estimated using the BEAST algorithm, and the shaded area represents a 95% credibility interval. The dashed vertical lines indicate a change point in Abril 2020 and cpPr denotes the corresponding probability of occurrence. MPC denotes the monthly percentage change.

During the period under review, 21,511 attempted feminicides were reported. The statistical model identified four significant change points in the time series, in January

2019, December 2021, January 2023 and September 2024 (Figure 2 and Table 1). In the first period, from January 2015 to December 2018, the MPC was 2.13%, suggesting a significant increase. In the second period, from January 2019 to November 2021, the number of notifications remained practically constant at a mean of 162.8 reports per month, with no significant changes (MPC 0.09%, p=0.71). In the third period, from December 2021 to December 2022, the number of reported cases rose significantly, from 194 per month to 241 (MPC 2.58%, p<0.01). During the fourth period, reports of attempted feminicide increased from 202 cases in January 2023 to 302 cases in October 2024 (MPC 2.15%). In the final period, from September 2024 to December 2025, there was no significant increase in the number of reports, with a MPC of 0.06 (p = 0.91).

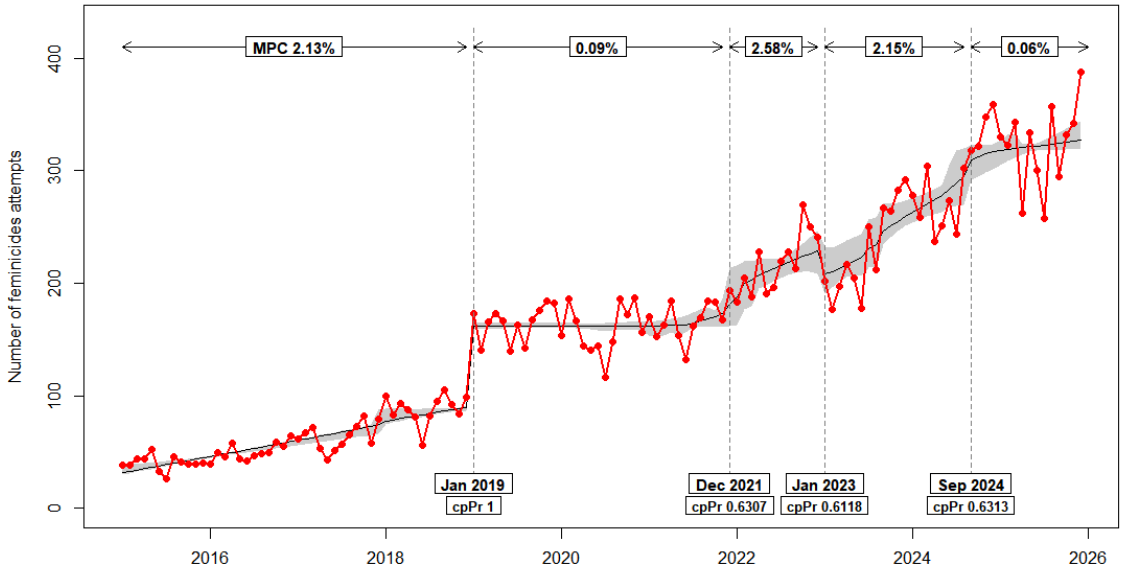

Figure 2. Number of reported cases of feminicides attempts in Brazil from January 2015 to December 2025 (red line). The black line shows the trend estimated using the BEAST algorithm, and the shaded area represents a 95% credibility interval. The dashed vertical lines indicate the position of the change points and cpPr denotes the corresponding probability of occurrence. MPC denotes the monthly percentage change.

Table 1. Monthly percentage change (MPC) for each time interval defined in the BEAST analysis.

Period	MPC (%)	95%CI	*p* value	Reports at the start and finish of the period
Reports of feminicide				
Jan 2015 – Mar 2020	1.76	(1.40 – 2.11)	<0.01	47 – 126
Apr 2020 – Dec 2025	0.29	(0.15 – 0.43)	<0.01	99 – 158
Reports of feminicide attempts				
Jan 2015 – Dec 2018	2.13	(1.67 – 2.59)	<0.01	38 – 99
Jan 2019 – Nov 2021	0.09	(-0.40 – 0.59)	0.71	173 – 168
Dec 2021 – Dec 2022	2.58	(1.75 – 3.42)	<0.01	194 – 241
Jan 2023 – Oct 2024	2.15	(1.11 – 3.19)	<0.01	202 – 302
Sep 2024 – Dec 2025	0.06	(-1.05 – 1.19)	0.91	318 – 388

MPC: monthly percentage change

Discussion

The results evidence that the monthly feminicide data comprises two distinct periods. The first period, from January 2015 to March 2020, was characterized by a sharp increase in reported cases (MPC 1.76%). The second period showed a slower but still significant increase (MPC 0.29%). The first period covers the initial implementation of SINESP reporting practices, part of the observed increase may reflect improvements in case registration rather than changes in the underlying incidence of feminicide. This possibility is reinforced by evidence that reporting completeness varied across Brazilian federal units prior to 2020 [9]. Although it is difficult to account for this source of bias in the time series, in order to ascertain whether this turning point is accompanied by other factors, the start of 2020 also coincides with the start of social isolation measures due to the COVID-19 pandemic. Law No. 454 of 20 March 2020 declared a state of community transmission of the virus throughout Brazil. The decentralized social distancing measures

subsequently adopted by Brazilian federal units may have altered patterns of gender-based violence by increasing the amount of time women spent in the household with intimate partners and potential abusers. At the same time, greater domestic and caregiving responsibilities for children, older adults, and sick family members may have further increased women's vulnerability during this period [13]. This interpretation is further supported by findings from the 'A Portrait of Feminicide in Brazil' study, which showed that 66.3% of feminicides between 2021 and 2024 occurred in the victims' home, highlighting the central role of the domestic environment in gender-based lethal violence [14].

However, the suspension or reduction of social protection services and the shift in healthcare priorities toward the management of suspected and confirmed COVID-19 cases may have made it more difficult for women experiencing domestic violence to access protection and support services [11]. These disruptions may have hindered victims' access to formal reporting channels, thereby contributing to the underreporting of domestic violence and feminicide.

Additionally, the BEAST analysis did not identify any new inflection points in the monthly feminicide time series following the onset of the COVID-19 pandemic. It is possible that part of the increase observed between 2015 and 2020 reflects improvements in the capacity of public institutions to identify, classify and record feminicide cases. As reporting practices became more standardized and legislation protecting women was strengthened, the growth in reported cases may have gradually stabilized over time. However, given the potential lack of police and medical infrastructure to accurately classify deaths as feminicide, as well as the obstacles to reporting such cases exacerbated by conservative and traditionalist movements, it is important to consider that levels of underreporting and statistical invisibility may be high. In any case, the slower growth in

the data series after 2020 may indicate a breakdown in the protection system, resulting in the establishment of a structural pattern of ongoing violence.

Furthermore, when interpreting the national trends derived from SINESP, it is critical to acknowledge that this system aggregates data from federal units with markedly different institutional capacities. As a result, apparent plateaus or decelerations observed in certain periods may not necessarily reflect a true stabilization of violence, but rather localized administrative constraints, budgetary crises, or structural backlogs in data reporting by specific state civil police forces. Historical asymmetries between the North/Northeast and South/Southeast regions regarding institutional funding, professional training in gender-sensitive investigations, and digital infrastructure often result in heterogeneous reporting rates. Consequently, an apparent decline or stabilization in the national aggregate may mask substantial underreporting in states where the public security apparatus lacks the resources needed to maintain consistent real-time data integration.

The statistical model identified four significant change points in the time series of attempted feminicides. During the first period, from January 2015 to December 2018, a remarkable increase in reported cases was observed. Given that this period coincides with the implementation and consolidation of the Femicide Law (Law 13,104/2015), it is possible that part of the recorded increase reflects a reporting effect, whereby the justice and health systems became more sensitive to classifying and recording homicides of women as femicides. In the second period, the number of notifications increased sharply in January 2019 and was mostly constant until October 2021. This period overlapped with the COVID-19 pandemic, during which support services were disrupted and victims' mobility was restricted, potentially affecting both access to protection services and the reporting of violence. As previously noted, violence against women may have been substantially underreported during the pandemic period. The significant increase in

notifications observed between December 2021 to December 2022 may therefore reflect, at least in part, the gradual resumption of routine activities and the relaxation of social distancing measures, which likely improved access to reporting channels and support services. In the fourth period, reports of attempted feminicide decreased in January 2023 and subsequently increased until July 2024. During the fifth and final period, from August 2024 to December 2025, the number of reports did not increase significantly. This apparent stabilization may indicate that, despite advances in legislation and reporting practices, existing prevention and protection measures have been insufficient to substantially reduce violence against women.

The temporal variations identified by the BEAST algorithm may also be associated with the ongoing development of Brazil's public security institutions and evolving legal frameworks. Although the Feminicide Law (Law No. 13,104/2015) represented a significant advance in the recognition of gender-related killings, the interpretation and application of the qualifying circumstance remained subject to state-level regulations and administrative practices, resulting in heterogeneity in reporting and case classification over the past decade. More recently, Law No. 14,994, enacted in October 2024, introduced more stringent criminal provisions by establishing feminicide as an autonomous crime and intensifying criminal penalties. This recent statutory shift, coupled with intense legal and social debates surrounding the classification of gender-based crimes, has likely increased institutional awareness of both lethal and non-lethal forms of violence against women. Therefore, the turning points observed in the latter years of the study period may reflect a transition towards stricter legal compliance and improved police scrutiny rather than fluctuations in the raw incidence of violence alone.

This study has several potential limitations. Firstly, and perhaps most importantly, it was based on reported cases of feminicide and attempted of feminicide, instead of the real

number of cases of murder of a woman for reasons of gender. Consequently, the findings may have been affected by underreporting, differences in reporting practices, and variations in case classification across federal units. Another limitation is that the available data did not include information on the type of homicide, the perpetrator's profile, the crime's location, or the weapon used. Knowing these details could provide a more comprehensive characterization of feminicides in Brazil. Finally, regional analyses were not performed and may represent an important avenue for future research, given the substantial heterogeneity in institutional capacity and reporting practices across the country.

Despite these limitations and the potential for substantial discrepancies between the actual number of feminicides and the cases recorded in SINESP, the results suggest the complex and non-linear trajectory of lethal violent crimes against women and attempted feminicides in Brazil between 2015 and 2025. This trajectory is characterized by periods of rapid growth, plateaus, and new turning points, with dynamics shaped by issues of social vulnerability, structural barriers to reporting, institutional culture, the impact of public policies and changes in the socio-political context. Although the interpretation of the turning points remains challenging, the findings underscore the importance of strengthening the capacity of justice, public security, and health systems to identify, classify, and report cases of gender-based violence, thereby reducing the statistical invisibility of victims. Furthermore, while recent public policies have improved legal protection and case recognition, their impact has been concentrated on response and protection mechanisms. Additional efforts are needed to address the structural determinants of gender-based violence and reduce the burden of feminicide in Brazil.

References

1. Campos C H. Feminicídio no Brasil: uma análise crítico-feminista. Sist Penal Violência 2015; 7(1):103-115. doi: 10.15448/2177-6784.2015.1.20275
2. de los Ríos ML. Por los derechos humanos de las mujeres: la Ley General de Acceso de las Mujeres a una Vida Libre de Violencia. Rev Mex Cienc Polít Soc 2007;49(200):143-165. doi: 10.22201/fcpys.2448492xe.2007.200.42568
3. Souza SMJD. O feminicídio e a legislação brasileira. Katálysis 2018; 21(3), 534-543. doi: 10.1590/1982-02592018v21n3p534
4. Caputi J, Russell DEH. Femicide: sexist terrorism against women. In: Radford J, Russell DEH. (Ed.). Femicide: the politics of woman killing. New York: Twaine Publishers, 1992. p. 13-24.
5. Pamplona R, Flores J. Police narratives of feminicide cases in Brazil, Anthropol Now 2019;11(3):21-30. doi: 10.1080/19428200.2019.1747895
6. Sánchez ODR, Rodrigues L, Zambrano E, Borrego NG, Surita FG. Gender-based violence in Brazil: scoping review of risk factors and associated health consequences. Cien Saude Colet. 2026;31(2):e17332024. doi: 10.1590/1413-81232026312.17332024.
7. Pereira GT, Lunardi FC, Correia PMAR, Vale A. Access to justice for women victims of domestic violence in Brazil: analysis and categorization of policies. Societies 2026; 16(5): 144. doi: 10.3390/soc16050144
8. Sandoval GA, Marinho F, Delaney R, Pinto IV, Lima CMD, Costa RM, et al. Mortality risk among women exposed to violence in Brazil: a population-based exploratory analysis. Public Health 2020;179:45-50. doi: 10.1016/j.puhe.2019.09.019.

9. Cerqueira D, Bueno S, Lima RS, Lins GOA, Coelho DSC, Moura L, et al. Atlas da Violência 2026. Instituto de Pesquisa Econômica Aplicada, IPEA, 2026.
10. Caicedo-Roa M, Bandeira LM, Cordeiro RC. Femicide and Feminicide discussing and expanding the concept. Rev Estud Fem 2022;30(3):e83829. https://doi.org/10.1590/1806-9584-2022v30n383829
11. Zhao K, Wulder MA, Hu T, Bright R, Wu Q, Qin H, et al. Detecting change-point, trend, and seasonality in satellite time series data to track abrupt changes and nonlinear dynamics: A Bayesian ensemble algorithm. Remote Sens Environ 2019;232:111181. https://doi.org/10.1016/j.rse.2019.04.034
12. Martinez EZ, Santos CB, Lizzi EAS, Zucoloto ML. Female homicides in the state of São Paulo, Brazil: a time series analysis from 1980 to 2022. Rev Bras Epidemiol 2026. In press.
13. Marques ES, Moraes CL, Hasselmann MH, Deslandes SF, Reichenheim ME. Violence against women, children, and adolescents during the COVID-19 pandemic: overview, contributing factors, and mitigating measures. Cad Saude Publica. 2020;36(4):e00074420. doi: 10.1590/0102-311X00074420.
14. Fórum Brasileiro de Segurança Pública. Retratos do Feminicídio no Brasil. São Paulo: FBSP, 2026.

Authors' contribution: *MLZ*: conceptualization, investigation, writing – original draft. *EASL*: formal analysis, methodology, validation, writing – review & editing. *ECM*: investigation, writing – review & editing. *EZM*: conceptualization, funding acquisition, project administration, software, supervision, writing – original draft.

Supplementary Material: R-Code for fitting the BEAST model

```
# Reading the monthly number of reported feminicides
# in Brazil from January 2015 to December 2025
y1 <- c(
 47, 47, 31, 29, 33, 40, 39, 62, 45, 55, 65, 49,
 73, 70, 74, 73, 54, 65, 54, 69, 67, 62, 76, 72,
 90, 85, 81, 91, 68, 84, 86, 90, 96, 94, 92, 92,
 98, 75, 89, 90,102, 93, 98, 88,125,112, 96,110,
105, 84,104,123,120, 94,108, 97,129,126,120,121,
 98,124,125,126, 99, 96,104, 95,118,102,126,133,
134, 89,113,119,122,113, 93,133,110,136,105, 99,
147,113,112,123,122,103,133,126, 95,128,116,138,
123,120,109,118,140,117,107,133,142,101,131,136,
145,118,121,119,120,107,110, 97,140,112,158,154,
125,129,117,142,120,127,115,125,122,138,140,158)

# Converting to a time-series object
myts1 <- ts(y1, start=c(2015,1), end=c(2025,12), freq=12)

# Reading the number of reported cases of feminicides
# attempts in Brazil from January 2015 to December 2025
y2 <- c(
 38, 38, 44, 44, 52, 33, 26, 46, 41, 39, 39, 40,
 39, 50, 46, 58, 44, 42, 47, 49, 50, 59, 55, 64,
 62, 67, 72, 53, 43, 51, 57, 65, 73, 82, 58, 79,
100, 83, 93, 88, 81, 56, 82, 95,105, 92, 84, 99,
173,141,166,173,167,140,163,142,168,176,184,182,
154,186,167,144,141,144,116,148,186,172,187,156,
170,153,163,184,154,132,162,169,184,183,168,194,
183,205,188,228,191,196,220,228,213,270,250,241,
202,177,197,217,205,178,250,212,267,264,283,292,
278,259,304,237,251,273,244,302,318,322,348,359,
330,323,343,262,334,300,258,357,295,332,342,388)

# Converting to a time-series object
myts2 <- ts(y2, start=c(2015,1), end=c(2025,12), freq=12)

# Load the Rbeast package into your active R session
library(Rbeast)

# Fitting the BEAST model for the time series
out1  <- beast(myts1, season='none', dump.ci = TRUE,
               mcmc.burnin = 1000, mcmc.samples = 100000)
out2  <- beast(myts2, season='none', dump.ci = TRUE,
               mcmc.burnin = 1000, mcmc.samples = 100000)


# Obtaining the change points
cp1    <- out1$trend$cp
cp2    <- out2$trend$cp
```

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