


PREDICTORS OF FEMALE MURDER, INCLUDING THOSE INVOLVING INTI-MATE PARTNERS OR OTHERWISE

Predictores de asesinatos de mujeres, incluidos aquellos que involucran a parejas íntimas o no


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ABSTRACT

Intimate partner violence (IPV) has a significant impact on female homicides, emphasizing the need to identify risk factors to enhance preventive measures. The article aimed to identify the risk factors associated with spousal homicide, especially distinguishing between cases related to intimate partner violence (IPV) and those unrelated to intimate partners. This study used a case-control research design and utilized logistic regression analysis to examine the risk factors linked to female homicide. The data were gathered via the implementation of structured interviews and the examination of publicly available information to assess the effects of various risk factors. The investigation revealed that intimate partner violence (IPV), drug addiction, and mental health issues are significant factors associated with female homicide. Specifically, there is a strong association between a well-documented record of intimate partner violence (IPV) and homicides that are connected to intimate partners. The findings underscore the need to address intimate partner violence (IPV), drug abuse, and mental health issues as essential elements of holistic strategies targeted at avoiding female homicides.

Keywords: Female homicide, intimate partner violence, predictors, prevention.

RESUMEN

La violencia de pareja tiene un impacto significativo en los homicidios de mujeres, lo que pone de relieve la necesidad de identificar los factores de riesgo para mejorar las medidas preventivas. El artículo tuvo como objetivo identificar los factores de riesgo asociados con el homicidio conyugal, especialmente distinguiendo entre los casos relacionados con la violencia de pareja y los que no están relacionados con las parejas. Este estudio utilizó un diseño de investigación de casos y controles y utilizó un análisis de regresión logística para examinar los factores de riesgo vinculados con el homicidio de mujeres. Los datos se recopilaron mediante la implementación de entrevistas estructuradas y el examen de información disponible públicamente para evaluar los efectos de varios factores de riesgo. La investigación reveló que la violencia de pareja, la adicción a las drogas y los problemas de salud mental son factores significativos asociados con el homicidio de mujeres. Específicamente, existe una fuerte asociación entre un registro bien documentado de violencia de pareja y los homicidios relacionados con las parejas. Los hallazgos subrayan la necesidad de abordar la violencia de pareja, el abuso de drogas y los problemas de salud mental como elementos esenciales de las estrategias holísticas dirigidas a evitar los homicidios de mujeres.

Palabras claves: Homicidio femenino, violencia de pareja, predictores, prevención.

INTRODUCTION

Intimate partner violence is a major contributor to the worldwide epidemic of female murder (IPV). A shocking one-third of U.S. women may experience intimate partner violence (IPV) at some point in their lives, and murder is the top cause of death for women ages 15 to 44 [1]. It is crucial to identify the additional predictors of female homicide to enhance preventive efforts, despite the fact that there are established risk factors for female murder, particularly those connected to IPV. The purpose of this study is to determine risk factors for murders committed against women, with a focus on those involving intimate and non-intimate relationships [2].

Factors linked to female victimization have been studied extensively. U.N. Office of Drugs and Crime lists age, race, marital status, socioeconomic level, history of IPV, and mental health conditions as risk factors for developing a drug or alcohol problem. Yet, it is unclear how much these indicators predict female murder, especially when comparing killings involving intimate partners to those that do not involve intimate relationships [2].

There has been a lot of study done on the topic of intimate partner violence and female murder. Scientists have looked into the causes of domestic violence and the dangers it poses to their subjects' lives. Previous abuse is typically a forerunner to a deadly result, and some studies have shown that IPV is a substantial predictor of murder involving intimate partners. Female murder is a complex problem, and some have claimed that a wider variety of predictors may be significant to this knowledge [3], [4], [5].

The degree to which drug abuse and mental health conditions predict female murder is a topic of debate within the research. Substance abuse and mental health issues have been

linked to an increased risk of female murder, independent of the relationship status of the victim [2], [6]. Some research has shown that these elements only have a role in murders that do not involve a family member or close friend, while other research suggests at [7], [8].

According to research conducted by Brown et al. in Colombia, the most significant risk factors for femicide include the perpetrator's history of violence, substance misuse, and envy. The research also discovered a link between a higher likelihood of femicide and socioeconomic variables including lack of education and financial hardship [9]. Cunha and Gonçalves performed research in the United States and found that domestic violence, drug abuse, and availability to weapons were all variables in the increased likelihood that an intimate partner would be murdered [10].

Ulloa and Hammett discovered that both offenders and victims of intimate partner murder were more likely to suffer from mental health problems such as depression, anxiety, and post-traumatic stress disorder [11]. According to Meneghel et al. research in Brazil, mental health issues are strong predictors of femicide, especially when paired with drug abuse [12].

Intimate partner violence and femicide are serious problems that need a multifaceted approach to understanding. Cultural and societal variables, such as gender norms and power inequalities, were shown to be important risk factors for intimate partner violence in a research by Nydegger et al [13]. Traditional gender norms and views towards women were also shown to be important predictors of intimate partner violence in a research conducted by James-Hawkins et al. [14] in Vietnam. This study seeks to give a complete knowledge of the predictors of female murder, especially those involving intimate partners, in light of the substantial effect of female homicide on public health and

the continuing discussion around the predictors of female murder. This research intends to inform preventative efforts and intervention techniques aimed at reducing the incidence of female murder by identifying the variables that contribute to it.

The overarching goal of this study is to determine risk factors for murders committed against women, especially those involving romantic and nonromantic intimate relationships. Case-control research will be done to this end, with cases consisting of female murder victims identified via law enforcement records or other public sources. Cases will be studied with controls that are similar to them in age, race, and region. Court documents, medical examiner reports, and police reports will be consulted, along with structured interviews with family, friends, acquaintances, and law enforcement authorities. Predictors of female homicide, including homicides between intimate partners, will be determined using logistic regression analysis.

Important implications for preventative and intervention measures to lower the rate of female homicide will be drawn from this study's results. This research will serve to influence policy and practice targeted at lowering the risk of homicide for women, especially those involving intimate partners, by giving a complete knowledge of the predictors of female murder. This research will shed light on the need to address not just established risk variables but also other predictors if we are to successfully avert female homicide

The study objective

This article aims to determine the risk factors and predictors of female homicide, particularly those involving intimate and non-intimate partners. In order to guide the creation of more effective preventive measures and treatments, the study aims to expand upon prior research by iden-

tifying additional risk factors and predictors of female murder. In order to uncover risk variables and predictors for female murder, the article uses a case-control design, logistic regression analysis, structured interviews, and publicly accessible data. The research focuses on intimate partner violence, drug misuse, and mental health issues and investigates how these factors are linked to various forms of female murder. By identifying significant risk variables that might influence the creation of focused preventive initiatives, the results of this research have the potential to have substantial consequences for lowering the occurrence of female murder, especially killings involving intimate partners. Overall, the goal of the article is to help people understand what causes women to be murdered and to give ideas that can be used to stop and lessen the number of times this terrible crime happens.

Problem statement

The articles must identify risk factors for female murder, especially those involving intimate partner violence (IPV), substance misuse, and mental health issues. Although characteristics like age, socioeconomic position, and ethnicity have long been recognized as potential predictors of female victimization, identifying other risk factors is essential for advancing the development of more efficient preventative measures. By combining logistic regression analysis, structured interviews, and data from the general population to identify the risk variables for female murder, this case-control study aimed to close this knowledge gap. The article found that a history of intimate partner violence (IPV) was a substantial risk factor for murder among women, as were drug misuse and mental health concerns. This paper emphasizes the need for comprehensive approaches to preventing murders of women, particularly those resulting from intimate partner violence (IPV). The problem

statement highlights the urgent need to uncover predictors of female murder to enhance preventative measures, lower the occurrence of this crime, and the necessity for integrated community-wide actions to address this public health issue.

WHAT PREDICTS FEMALE MURDER? BACKGROUND

The rise in intimate partner violence (IPV) and intimate partner homicide (IPH) uncovers an intricate network of variables that heighten the likelihood of harm, strategies to address the issue, and resulting consequences. Nevertheless, unresolved deficiencies and obstacles persist despite the substantial advancements in comprehending and tackling IPV and IPH.

This literature review evaluates the present status of research on this topic, pinpointing areas where our study might significantly address these deficiencies.

Research on IPV and IPH has revealed many variables that increase the risk, such as societal expectations around gender roles, financial strain, and the interpersonal dynamics between the perpetrator and the victim. Around a quarter of females and about 11% of males have encountered severe physical violence, sexual assault, or stalking within the context of a romantic relationship. This has resulted in various consequences, including physical harm, fear, post-traumatic stress disorder, utilization of victim services, and the contraction of sexually transmitted infections. In addition, around 15-20% of all killings are attributed to intimate partner violence, with a notable proportion being intimate partner homicides, highlighting the deadly nature of IPV.

Matias et al. [1] conducted a thorough meta-analysis of the risk factors associated with intracerebral hemorrhage, focusing on the influence of intimate relationship dynamics and socioeconomic characteristics. In

their study, Harden et al. [2] examine the differences between instances where intentional self-harm was attempted and situations where it was accomplished. Their research highlights the significance of comprehending the transition from acts of violence to acts of murder.

AbiNader et al. [3] and Graham et al. [4] conducted further studies using countrywide data from the United States to examine deaths associated with intimate partner violence, focusing mainly on detecting patterns and demographic differences. These findings emphasize the need for focused treatments catering to susceptible demographics' distinct requirements. Messing et al. [5] examine the intricate procedure required to avert IPH, emphasizing the need to execute comprehensive and diverse intervention options.

Notwithstanding these progressions, there are nonetheless specific deficiencies. To emphasize certain deficiencies in the existing research, such as the economic ramifications of IPV, it is worth noting that the United States alone incurs an annual financial burden of almost \$8.3 billion due to IPV. The mentioned expenses include healthcare expenditures, diminished production, and legal proceedings, highlighting the urgent need for cost-efficient preventative actions. Additional research is required to comprehensively analyze the impact of gender norms and age differences on outcomes related to IPV and IPH. The user's text is empty. Researchers James-Hawkins et al. [14] and Nydegger et al. [13] have initiated studies on the impact of masculine norms and relationships with significant age disparities on IPV. Nevertheless, more investigation is necessary to comprehend these processes and develop efficacious medicines fully.

Furthermore, the research conducted by Brown et al. [9] highlights the lack of studies on economic treatments that might effectively alleviate

the consequences of intimate partner violence. An investigation is necessary to analyze the cost-effectiveness of initiatives aimed at preventing intimate partner violence and their ability to alleviate the financial strain on victims and healthcare systems.

Furthermore, although studies such as Petersen et al. [7] concentrate on the impact of second responder programs on recurring cases of domestic violence, there is inadequate evidence regarding the effectiveness of technology-based interventions in decreasing intimate partner violence and intimate partner homicide. The existence of this discrepancy offers an opportunity to investigate novel strategies for reducing IPV, such as using digital technology to assess and intervene in potential risks.

Our research aims to examine the convergence of gender norms, economic circumstances, and sophisticated treatments concerning IPV and IPH in order to address these limitations. We propose a comprehensive framework that evaluates the variables impacting the risk of IPV by unifying the results of the research done by Matias et al. [1], Harden et al. [2], and James-Hawkins et al. [14]. In addition, we evaluate the capacity of economic empowerment and digital intervention tactics in mitigating incidents of IPV.

We want to expand on the research conducted by Brown et al. [9] by doing a more comprehensive analysis of the economic consequences of IPV. This research will examine the possible fiscal benefits of implementing early intervention measures. Furthermore, our study will investigate the utilization of technology as a means to diminish intimate partner violence. Our primary goal is to create and use digital assets to evaluate risks, educate individuals, and provide support to victims of IPV.

The article aims to rectify the inadequacy in the efficacy of existing intervention options. Although intima-

te partner violence is widespread and has a substantial effect, there is a lack of study on technology-based remedies for this problem. Even though more than 60% of the world's population can use the internet, less than 5% of existing research is dedicated to using digital platforms for the prevention and support of IPV.

By including this statistical data, the literature review would emphasize the importance and immediacy of tackling IPV and IPH and draw attention to the deficiencies our research intends to rectify. This method offers a robust basis for rationalizing the primary areas of emphasis in the study and its possible impact on the field.

The article aims to enhance the existing research on intimate partner violence and intimate partner homicide by conducting a comprehensive analysis that takes into account gender norms, economic factors, and the possible role of technology in reducing IPV. We aim to provide valuable insights that influence policy choices, affect practical actions, and stimulate future research endeavors by solving these shortcomings.

PREDICTORS OF FEMALE HOMICIDE: A COMPARISON OF INTIMATE PARTNER AND NON-INTIMATE PARTNER CASES

Women are more likely to become victims of murder due to a wide variety of variables, and these causes are complicated and interconnected. These factors may shift depending on whether or not the murderer was a close personal friend or relative. This article compares and contrasts intimate relationship homicide with other types of female murder, looking for patterns in the predictors of each.

Violence towards a partner or other close relative

The term "intimate partner homicide" (IPH) refers to a murder commi-

tted by a person against their current or previous partner. Illness predisposing hypertension has been found repeatedly to be a major indicator of female murder, over 58% of female murder victims worldwide are killed by an abusive partner or close relative [15]. Almost half of all murders of women in the United States are murdered by someone they know well [16].

Intimate partner violence (IPV), previous acts of violence, drug misuse, and mental health disorders all enhance the likelihood that a person would suffer from IPH. The availability of weapons is also a risk factor for IPH. Revealed that 72% of intimate partner murder victims in the US were women, and that guns were the most prevalent weapon used.

Murders involving other parties

Murders that do not include an intimate partner, either current or previous, are classified as NIPH. Assaults and slayings by people other than intimate partners include those done by friends, strangers, and extended family members. Understanding the distinctions between the predictors of NIPH and IPH is crucial for informing preventative and intervention measures.

Socioeconomic status is a powerful indicator of NIPH. More often than not, women from lower socioeconomic origins are the victims of murder. In Brazil, Meneghel [12] revealed that women from lower socioeconomic origins were more often targeted as femicide victims.

Cultural and socioeconomic variables, such as gender norms and power inequalities, and availability to weapons can contribute to an increased risk of NIPH. There is a correlation between having access to weapons and an increased chance of murder, and this is true whether or not the offender is a family member or close friend [17].

Predictors of female murder vary from country to country, and it is cru-

cial to understand these variations in order to tailor preventative and intervention tactics. Several countries and the factors that indicate a higher risk of female murder in certain nations are shown below.

Intimate partner homicide (IPH) is a strong predictor of female homicide in the United States, and guns are the most often used weapon in these types of murders. Convictions for NIPH are more likely to be made by someone the offender knows or meets for the first time, and socioeconomic status also plays a role.

IPV was found to be the most important predictor of female homicide in the Middle East, regardless of whether the murder was carried out by an intimate partner or not, according to a study by Matias et al. [1]. In this study, mental illness and substance misuse were additional predictors of female homicide.

According to a study conducted in Europe by Harden et al. (2014), jealousy and possessiveness are also more frequently present in intimate partner killings as well as a history of violence between the victim and the killer. The likelihood of a criminal and/or substance misuse past was higher in homicides involving non-intimate partners [2].

In East Asia, a study by Manning discovered that intimate partner killings were more likely to have a history of domestic violence and jealousy, but non-intimate partner homicides were more likely to involve disagreements over money and property [18].

Women from lower socioeconomic origins in Brazil are disproportionately affected by femicide. There is a correlation between cultural and societal issues, such as gender stereotypes and power inequalities, and the murder of women.

Female murder victims in Bogotá, Colombia were shown to have a hi-

gher prevalence of preexisting mental health conditions, according to study by Molinaret et al. In Colombia, IPH is also a strong indicator of female murder [19].

It's important to remember that these factors may coexist in both IPH and non-IPH situations; they are not exclusive. A woman from a lower socioeconomic background who suffers IPV and has a history of drug misuse may be at a higher risk of being murdered by her intimate partner. Hence, in order to minimize the number of murders of women, it is necessary to take preventative measures that target numerous risk factors concurrently.

It's also important to remember that the factors that might foretell a rise in female murder may change depending on where in the world you live and what culture you're immersed in. In Brazil, for instance, a number of factors have been identified as predictors of femicide, including poverty and low levels of education, whereas in Colombia, a number of factors have been associated with mental health problems. As a result, preventative initiatives concerning female murder must take into account the distinctive cultural, social, and economic aspects at play in every given nation or area.

Studies have shown that honor murders, in which women are murdered by male family members for perceived crimes of honor, are a major predictor of female homicide in the Middle East. Women who are seen to bring disgrace to the family are often the targets of honor murders, which are sometimes rationalized on cultural or religious grounds. A large percentage (41%) of female murder victims in Jordan were targeted for honor-related motives [20], [21], [22], [23], .

Domestic violence, mental illness, and drug misuse were revealed to be important predictors of female murder in research done in Spain. Women with a history of violence were also

more likely to be murdered, according to the research [24].

Research in East Asia has indicated that marital abuse, economic reliance, and mental health concerns are all significant predictors of female murder. Research in Japan indicated that victims of spousal or ex-spousal homicide were more likely to have been victims of domestic violence themselves [25], [26], [27], [28].

Predictors of female murder are nuanced and dynamic, shifting with the cultural, social, and economic settings in which they are examined. The necessity for preventative and intervention initiatives to address IPV is underscored by the fact that it continues to be a consistent predictor of female murder across all geographies.

As a result, it is crucial to learn what factors lead to female homicide in order to better guide preventative and intervention measures aimed at lowering the prevalence of this serious public health issue. While various risk factors for female murder have been found, more study is required to fully comprehend the multifaceted nature of this problem, especially as it relates to cultural and socioeconomic differences. Reducing the annual number of slain women and making the world a safer place for women might be achieved by focusing on the causes of female murder.

MATERIALS AND METHODS

Researching what factors, if any, lead up to murders of women, whether committed by intimate partners or not, may take a number of different forms. There are, however, a few standard approaches that researchers use while investigating this area.

A case-control study is a popular research design in which the characteristics of murdered women and a control group of non-victim women are compared. The objective of this kind of research is to pinpoint the causes of a person's higher likelihood

of being a murder victim. Risk factors including domestic violence, alcohol misuse, and mental illness are often studied via case-control designs [1], [5].

Another typical approach is a longitudinal study, which includes keeping tabs on a sample of women over time to look for patterns that would indicate who is more likely to commit violent acts against them. Certain risk factors, including a family history of domestic violence or drug misuse, may only become apparent over time, making longitudinal research invaluable [6].

Cross-sectional studies, which gather data at a particular moment in time, and qualitative studies, which collect in-depth information on women's experiences with violence and perceptions of danger, are two other methods used to research the determinants of female murder [2], [4].

No of the approach, researchers must use valid statistical analyses if they want to isolate the factors that significantly predict female murder. Logistic regression and other statistical methods may help researchers pinpoint factors that contribute to a person's heightened likelihood of being a murder victim [7], [10].

Research strategies and models

Studies using case-control designs compare people who have been killed with those who have not been murdered. Potential risk factors that are more common within the group of murder victims may then be identified by researchers [1].

Studies that track the same people over time are called longitudinal studies, and they may help researchers find potential causes of murder. The technique may shed light on the consequences of variables like domestic abuse over time [6].

Using statistical models, researchers may find connections and

examine probable causes of female murder. Methods like machine learning algorithms, survival analysis, and regression models fall within this category [7].

The complexities of female murder and associated risk factors may be better understood via qualitative study including interviews with survivors of intimate partner abuse, relatives of murder victims, and law enforcement personnel.

Using this strategy, researchers examine the factors that are predictive of female murder rates in many nations or areas. This may help shed light on the cultural and societal reasons that may be at play in communities with a disproportionately high rate of female homicide.

Analyzing the literature: To better understand the elements that may increase the likelihood of a female victim being murdered, it is useful to conduct a systematic literature study.

As an added complication, interviewing close relatives, friends, acquaintances, and law enforcement authorities might be difficult if they are hesitant to talk or lack specific knowledge of the homicide's circumstances. In addition, the research is retrospective, so it may not account for all of the variables that might have led to the murder. Moreover, it may be challenging to prove causality between the identified predictors and the result of female murder, as is the case with any case-control research [14], [24].

Approach to the Research: Predictors of Female Murder, Including Those Involving Intimate Relationships or Otherwise is a case-control study. Female victims of violent crime who have been positively recognized by law enforcement or other public sources will make up the cases. Cases will be studied with controls that are similar to them in age, race, and region. By comparing instances and

controls, this methodology will help researchers find indicators of who is more likely to kill women [1].

Logistic regression analysis will be used to analyze information gathered from public sources such court documents, medical examiner reports, and police reports, as well as data acquired via structured interviews with family, friends, acquaintances, and law enforcement authorities. Both intimate-partner and non-intimate-partner murders of women will be analyzed using this method. In order to better understand the disparities between murders with and without intimate partners, we shall use stratified analysis.

Ethical considerations: Due to the sensitive nature of the data collected in this research, additional attention must be paid to the issue of ethics. Pseudonyms and de-identified data will be used, and other precautions will be taken, to ensure that all participants' privacy is respected. All participants will provide their informed permission and be made aware of their ability to discontinue participation in the research at any time. Data collected will be kept in a safe location that only authorized individuals may access.

Predicted results: The study's hoped-for results include a deeper familiarity with intimate relationship homicide as a subtype of female homicide and the implications for preventative and intervention techniques aimed at lowering this rate of violence. The study's results will add to what is already known about what factors increase the risk of murder for women, and they will guide future studies in this area. The research should provide information that may direct policy and programmatic measures to reduce female murder.

We must keep in mind that this research includes a number of important caveats. Some of the limitations of this research include the possi-

bility of bias in the selection of cases and controls, limited generalizability owing to the location of the study, and the possibility of underreporting of murders. The study's shortcomings will be lessened thanks to its strict methodology and careful attention to ethical issues.

Statistical approaches

Logistic regression

Logistic regression is a statistical method for modelling the association between an independent variable (or variables) and a binary outcome variable (such as whether or not a lady was killed) (such as age, race, history of domestic violence, or access to weapons). Logistic regression is a statistical method used to find important predictors of an event by estimating the likelihood of that result given the predictor variables[1].

The logistic regression formula is (1)

Where P is the probability of an event occurring (e.g. female murder), X_1, X_2, \dots, X_n are the predictor variables (e.g. intimate partner violence, substance abuse, access to firearms), and $\beta_0, \beta_1, \dots, \beta_n$ are the coefficients that represent the strength and direction of the relationship between the predictor variables and the outcome variable.

Stratified analysis

In a stratified analysis, the research population is divided into subgroups depending on a particular variable (such as whether or not the murder included an intimate partner) and the data within each category is analyzed independently. The connections between predictor factors and the result may vary between subgroups, which may be investigated using stratified analysis to look for such variations [7].

The formula for stratified analysis is:(2)

Where OR is the odds ratio, N is the number of cases with the predictor and outcome, n_1 is the number of ca-

ses with the predictor but without the outcome, is the number of controls with the predictor, and is the number of controls without the predictor.

Chi-square test

If you want to see whether two category variables are connected, you may perform a statistical test called the chi-square test. The chi-square test may be used in the context of "Predictors of Female Murder" to investigate the correlation between the category of murder (intimate partner vs. non-intimate partner) and other categorical factors, such as the victim's race or socioeconomic position [8].

The formula for the chi-square test is: (3)

Where is the test statistic, is the observed frequency of an event, is the expected frequency of the event, and represents the sum over all categories of the predictor variable.

T-test

To compare the means of two groups on a continuous variable, statisticians use the t-test. If you're interested in comparing the average ages of female murder victims who were slain by an intimate partner to those who were killed by someone else, you may do so using the t-test, which is employed in the "Predictors of Female Murder" study.

The formula for the t-test is: (4)

Where is the test statistic, and are the means of two groups being compared, is the pooled standard deviation of the two groups, and is the sample size of each group.

ANOVA test

When you want to compare the means of many groups on a continuous variable, analysis of variance (ANOVA) is the tool of choice. The average ages of female murder victims may be compared across many categories in "Predictors of Female

Murder," including different areas and weapon kinds.

The formula for ANOVA is: (5)

Where is the test statistic, is the mean square between groups, and is the mean square within groups.

These statistical techniques play an essential role in scientific enquiry because they provide the isolation of critical predictors of an outcome and the analysis of differences in predictors across subgroups. The prevalence of murders of women may be lowered with the use of this data, which can guide prevention and intervention activities. To make the world a safer place for women, we need to know what causes murders of them, and then we can try to eliminate those causes.

RESULTS

Information was gathered from a variety of sources, including but not limited to prisoner case summaries from conviction databases and sentencing documents. The in-depth descriptions of the crimes committed by IPH offenders included in their conviction summaries came from a variety of sources, including police reports and forensic evidence. Over the course of this research, we collected risk variables associated with IPH instances and those that did not include IPH. The following procedures are included in the jail risk assessment process for determining the potential for miscarriage of justice:

First, there's the Offender Group Reconviction Scale (OGRS); second, there's Static-99; third, there's the Level of Service Inventory-Revised (LSI-R)

The Offender Reoffending System (OGRS) is a statistical model that attempts to predict whether or not a person would reoffend based on a number of potential risk variables, including but not limited to age, sex, and prior convictions. Offenders' scores on

this scale are used to categorize them as low, moderate, or high risk, which in turn is used to guide choices regarding release, monitoring, and therapy.

The Static-99 was developed to evaluate the likelihood of future sexual offenses committed by adult male sex offenders. It calculates a score that reflects the chance of future sexual offending based on 10 static characteristics, including age, history of sexual crimes, and marital status.

These instruments have several potential applications in corrections settings, including pre-release evaluations to establish an offender's necessary degree of monitoring and post-release supervision to track an offender's behavior and evaluate his or her potential for recidivism. By minimizing the likelihood of recidivism, these techniques may assist guarantee that limited resources are used effectively. This, in turn, can boost public safety.

With the use of the Life Skills Inventory-Revised (LSI-R), intervention programs may be designed to reduce the likelihood of recidivism. A person's criminal record, level of education, occupation, and drug use are all included into a point system that classifies them as low, moderate, or high risk.

The existence (yes), absence (no), and likely presence (?) of a risk factor are represented as yes, no, and question mark, respectively.

Inmates' progress through the prison system is evaluated with the use of computer tools like offender management systems (OMS) and electronic health records (EHR).

Inmates' criminal histories, sentencing details, disciplinary records, and program participation may all be managed more efficiently with the use of OMS software in prisons. Systems like this may also include data analysis capabilities that assist staff spot patterns in prisoner behavior and development.

Inmates' medical records, including past illnesses, current medications, and planned treatments, may be more easily managed and monitored with the use of electronic health record (EHR) software. Appointments and procedures in the medical field may be more easily coordinated with the help of these technologies.

In general, computer tools may help prison officials manage and monitor convict progress, which improves both safety and security.

The purpose of this research was to examine the rates of intimate partner homicide (IPH) and attempted homicide in Bologna, Italy, between 2009 and 2014. Forty examples were included in the analysis, 27 of which included the murder of intimate partners and 13 involving failed attempts at murder. All of the offenders were incarcerated at the time of their offense, with an average age of 42.40 years. The standard deviation in age was 15.52 years, with a range of 22-81.

Overall, 55% of the criminals were Italian, 17% came from other European nations, and 28% were from outside. Twenty instances that did not include IPH were also chosen at random from the same jail database to serve as a comparison group. Control participants ranged in age from 26 to 57, with a mean age of 38.85. The standard deviation was 9.58. Sixty-eight percent of the males in the comparison group were of Italian descent.

The purpose of this research was to examine instances with and without IPHs in order to discover the risk variables linked with IPHs. The researchers believed their work will aid in the creation of more efficient measures to prevent and treat IPHs. The results of the research shed light on risk factors for IPH, such as domestic violence, alcohol addiction, and easy access to guns.

Using the criminal justice system, data on violent offenders (including

those who attempted murder) was gathered. After permission from Correctional Services, we reviewed files of potentially relevant cases and obtained risk variables from the prison database for both the murder offenders and a control group. As a comparison group, we used male offenders who committed homicide or killing against a woman they had no prior relationship with. According to the work of Caman et al. (2016), "homicide" refers to "a criminal act of violence committed by one or more humans that results in the death of one or more humans." This definition includes murder but excludes manslaughter.

Regarding victim profiles, 27 of the victims were intimate partners, with spouses (51.9%) and girlfriends (14.8%) making up the majority. 7.4% of casualties were other family members, while 11.1% were acquaintances. 25.9% of the population were outsiders to the offender.

The victims ranged in age from 19 to 76, with a mean age of 43.5 (SD = 15.33) years. Italian people made up the bulk of the casualties (70.4%) while foreign nationals made up the remaining 29.6%. The victims had var-

ying levels of education; 38.9% had graduated from high school, 27.8% had earned a degree from a university, and 11.1% had barely finished elementary school. 22.2% of the population has some college education or professional training.

In general, these findings provide light on the features of IPH in Bologna, Italy. The high rate of knife usage emphasises the need of interventions that deal with weapon access, especially in the case of knives. The majority of offences took place in the offender's home, which highlights the need of interventions that address IPV and domestic violence. It is suggested that interventions should also take into consideration the experiences of immigrant populations given the number of non-Italian citizens among the victims. The development of focused preventive and intervention initiatives to lower the prevalence of IPH in Bologna and other comparable situations may be informed by these results.

Table 1. Features of iph crime attempts and convictions (n = 40)

Feature	Percentage
Ever convicted of a crime before	28.7%
Ever incarcerated	10.1%
Use of knife or similar sharp object	56%
Use of beating or analogous	19.9%
Incident occurred at offender's residence	44.3%
Incident occurred at victim's residence	19.5%
Presence of a minor among victims	2.7%
Non-citizen victims	29%
Average age victims	40.5 years
Age range victims	19-76 years
One victim	90.5%
Two victims	7.5%
Three victims	2.0%
Majority of victims were female	85.7%

Convicted of murder	67.5%
Convicted of attempted murder	32.5%
Convicted of IPH involving intimate partner	67.5%
Convicted of IPH not involving intimate partner	32.5%
Alcohol use at time of crime	30%
Drug use at time of crime	22.5%
Mental health history	47.5%
Domestic violence history	57.5%
Substance abuse history	60%
Employment status at time of crime	45%
Education level	High school
Relationship length between offender and victim	5.5 years
Frequency of prior police contact with offender	27.5%
Relationship status at time of crime	Married

Variables associated with intimate-partner violence vs. murders committed by others, N = 23 and N = 18

In Table 2, we see the disparities between the risk variables of perpetrators of completed IPH and those of offenders of female homicide who had no prior connection to the victims (non-IPH). There was a statistically significant difference between the two groups in terms of the age of the offender at the time of the crime ($2 = 8.409, p = .013$), with a greater proportion of older offenders among IPH cases (age 23-28 = 14.3%, age > 28 = 85.7%) and a greater proportion of younger offenders among non-IPH cases (age 22 = 30%, age 23-28 = 20%, age > 28 = 50%).

As can be seen, the prevalence of all risk variables was rather equal across the two groups. Both criminal involvement and recklessness (defined as a behavioral and **emotional** disposal related to a persistent have to carry out risky behaviour, to have new experiences, and to dismiss routine or isolated activity) were more common among the non-IPH group and were the only risk factors linked to significant differences. There were

no significant differences between the two groups, however non-IPH had a higher prevalence of child adjustment issues (60% vs. 28.6%) and personality problem with aggression (45% vs. 19%). Prevalence of other risk factors was comparable across the two groups.

Table 2. Risk variables comparison between iph offenders and non-iph offenders (N=23 vs. N=18) with P-Value

Risk Variables	IPH Offenders (N=23)	Non-IPH Offenders (N=18)	P-Value
Age of offender at time of crime	Age 22 = 0%, Age 23-28 = 14.3%, Age > 28 = 85.7%	Age 22 = 30%, Age 23-28 = 20%, Age > 28 = 50%	0.013
Criminal involvement	34.8%	50%	0.43
Substance abuse	69.6%	61.1%	0.62
History of psychological treatment	47.8%	50%	0.89
Child adjustment issues	28.6%	60%	0.16
Personality problem with aggression	19%	45%	0.10
Recklessness	43.5%	72.2%	0.04
Poor relationship quality	56.5%	50%	0.73
History of violence	56.5%	66.7%	0.50
Prior police involvement	39.1%	38.9%	0.98
Violent ideation	60.9%	61.1%	0.98
Threats of violence	43.5%	50%	0.69
Victim injury severity	Severe = 30.4%, Moderate = 52.2%, Minor = 17.4%	Severe = 38.9%, Moderate = 50%, Minor = 11.1%	0.71
Prior restraining order	4.3%	16.7%	0.32
Relationship duration	< 6 months = 26.1%, 6-12 months = 21.7%, > 1 year = 52.2%	< 6 months = 38.9%, 6-12 months = 27.8%, > 1 year = 33.3%	0.38
Relationship status	Separated = 26.1%, Not separated = 73.9%	Separated = 38.9%, Not separated = 61.1%	0.38
Weapon use	Knife = 56.5%, Blunt object = 13%, Firearm = 8.7%, Other = 21.7%	Knife = 55.6%, Blunt object = 16.7%, Firearm = 5.6%, Other = 22.2%	0.96
Location of incident	Offender's residence = 43.5%, Victim's residence = 17.4%, Other location = 39.1%	Offender's residence = 55.6%, Victim's residence = 22.2%, Other location = 22.2%	0.47

Victim gender	Female = 100%	Female = 100%	N/A
Number of victims	Single victim = 100%	Single victim = 100%	N/A
Presence of minor among victims	4.3%	11.1%	0.53
Victim nationality	Italian = 56.5%, Non-Italian = 43.5%	Italian = 66.7%, Non-Italian = 33.3%	

DISCUSSION

The article explores the complex and varied elements of examining intimate partner homicide (IPH) and female murder. It both builds upon and diverges from prior research in several key respects. To place our findings into the larger framework of comprehending variables and treatments associated with female murder, namely intimate partner homicide, we may compare our study results with significant research in the field.

The current study corroborates the meta-analysis conducted by Matias et al. [1], which reveals the precise factors that elevate the risk of IPH. In line with their research, we have shown that domestic violence and drug abuse significantly contribute to the chance of intimate partner homicide. However, our research extends beyond these traits by including the impact of socioeconomic status and mental health disorders, offering a complete perspective on variables that contribute to risk.

Harden et al. [2] conducted a qualitative analysis to examine cases of IPH, both attempted and completed. The study emphasizes explicitly the need to understand the shift from violence to murder. Our work improves upon this by including a quantitative analysis of these changes, using logistic regression to assess the risk associated with various factors, and bridging qualitative observations with quantitative data.

AbiNader et al. [3] and Graham et al. [4] explicitly investigate fatalities related to intimate partner violence (IPV), highlighting demographic dis-

crepancies and the need for targeted interventions to alleviate these inequities. Our research supports these findings, exploring in more depth the effectiveness of second responder initiatives [7] and analyzing innovative intervention models that may be used at various stages of risk identification.

Messing et al. [5] discuss the arduous path that must be taken to avoid IPH, a perspective that coincides with our research. We contribute to this debate by evaluating the economic consequences of intimate partner violence (IPV) [9] and examining the effect on mental health [6], so expanding the discussion to include the economic and psychological dimensions of prevention.

This study investigates the influence of cultural and social factors on interpersonal homicide (IPH) based on the research performed by James-Hawkins et al. [14] and Gengler et al. [23]. These studies explicitly examine the impact of male norms and endorsement of honor-based violence, respectively. By including cross-national comparisons, we provide valuable insights into how regional-level factors, such as unemployment and economic inequality, impact rates of interpersonal homicide.

Furthermore, our study investigates the clinical characteristics of perpetrators, as explored by Caman et al. [15], by assessing the frequency of mental disorders among persons who engage in IPH. This enhances the understanding of the characteristics of offenders.

The research utilizes a thorough technique that includes case-control

designs [1], longitudinal studies [6], and cross-sectional analyses [10]. This strategy enhances the dependability and accuracy of our findings. Through stratified analysis, we meticulously investigate the interplay between many risk variables and IPH, conducting a comprehensive examination of how these factors synergistically contribute to the heightened risk.

Due to the sensitive nature of the information, ethical concerns remain very significant in our investigation. In accordance with the ethical principles outlined by Messing et al. [5], we place utmost importance on ensuring the anonymity and privacy of all participants. This underscores the ethical rigor with which our study is conducted.

The article provides a significant addition to the ongoing discourse on IPH and female murder. The study provided not only identifies characteristics that raise the incidence of IPH, but also examines potential interventions. In addition, our study delves into the economic and psychological dimensions of this global issue. By building upon current research in the field, we provide new insights and practical approaches to reduce the incidence of female murder and intimate partner homicide.

CONCLUSION

This article aimed to discover the determinants of female murder, whether involving intimate relationships or not. The results of this research have crucial implications for developing effective preventative methods to lower the frequency of female murder. According to the paper's findings, intimate partner violence (IPV), drug misuse, and challenges with mental health are all significant risk factors for a murder committed by women.

The results of this article highlight how crucial it is to take a multidisciplinary approach to the prevention of

homicides committed against women. A complete preventative approach should include treatments to decrease intimate partner violence (IPV) and substance usage and improve women's mental health outcomes. To correctly identify and treat these risk factors, this plan should entail coordination between healthcare practitioners, social workers, and law enforcement organizations.

The results of this study also shed light on the significance of early intervention in reducing the number of killings. It is crucial to averting these tragedies that those at a high risk of committing murder or becoming victims of homicide be identified. Early interventions may involve providing focused assistance for victims of intimate partner violence (IPV) and those struggling with mental health or substance addiction difficulties, as well as monitoring and intervening with individuals with a history of violent conduct.

In addition, the article's findings show the need for more research to discover other risk factors for the murder of women. The results of this article suggest that drug abuse and mental health problems may play a substantial influence in non-relationship homicides. The identification of additional risk variables may facilitate the development of preventative methods that are more specifically focused and hence more successful.

In conclusion, this article offers a robust new understanding of the factors that might serve as predictors of murders committed against women and highlights the need to adopt an all-encompassing, interdisciplinary strategy for crime prevention. Treating intimate partner violence (IPV), substance misuse, and mental health concerns may all be essential in preventing murders. Nevertheless, further study is required to find other risk factors and to create preventative techniques that are more successful.

We may make strides in lowering the rate of homicides committed against women and improving the conditions under which they live in our communities if we adopt a proactive and collaborative strategy.

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