



Unveiling the Dark Nexus: A systematic review on the interplay of mental health, substance abuse, and socio-cultural factors in femicide

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ABSTRACT

A shared definition of femicide would help to distinguish it from the murder of a woman and understand its root causes favoring prevention. We conducted a Systematic Literature Review (SLR) to assess how (and if) femicide cases were related to mental disorders. Articles papers that explicitly define or discuss femicides or articles that, albeit not expressly mention femicides, thoroughly compare generic homicides and homicides with female victims. We analyse 3546 articles were retrieved from the databases, and 75 studies fulfilled the eligibility criteria and were included in the SLR. Many forms of femicide emerge worldwide as people's values, beliefs, attitudes, and behaviours evolve (intimate partner femicide, femicide-suicide, religious femicide, honour, revolt femicide) and state of vulnerability. A tiny percentage of femicides occur at the hands of subjects with diagnosed mental disorders, and controversies exist regarding the possible link between femicide and the use of drugs and/or alcohol and other factors. The complex problem of violence against women must be addressed with a transdisciplinary approach and targeted interventions for both the victims and the perpetrators. The present SLR shows that it is not possible to link femicides to mental disorders and that socio and cultural factors appear to be more relevant. Further quantitative research is warranted to disentangle the root causes of this heinous phenomenon plaguing our times. Our studies show that using the proposed definition of femicide would help to delimit and adequately recognise violence in courtrooms, promote the culture of equality, and identify adequate policy strategies for prevention.

1. Introduction

Previously, the authors had proposed a definition of femicide, starting from one of the founding principles of medical ethics - autonomy - as a homicide perpetrated due to the failure to recognise the victim's right to self-determination [1]. Based on this, a medico-legal comparison between female and male homicides in Parma (Italy) was carried out. The proposed definition seemed to allow us to establish some lesional and circumstantial patterns that could represent evidence

of femicide, distinguishing it from the homicide of a woman [2]. The present study continues the authors' efforts to frame, through a systematic review of the literature, with the transdisciplinary approach, the salient aspects of femicide, attempting to identify possible risk factors centred mainly on the mental disorders or drug abuse of the murderer.

Femicide is typically defined as killing a woman *because* she is a woman. If the target of the violence is a specific woman, intimate partner femicide likely takes place [3]. In sexual femicides, the woman's death consists of two main components: femicide and the sexual

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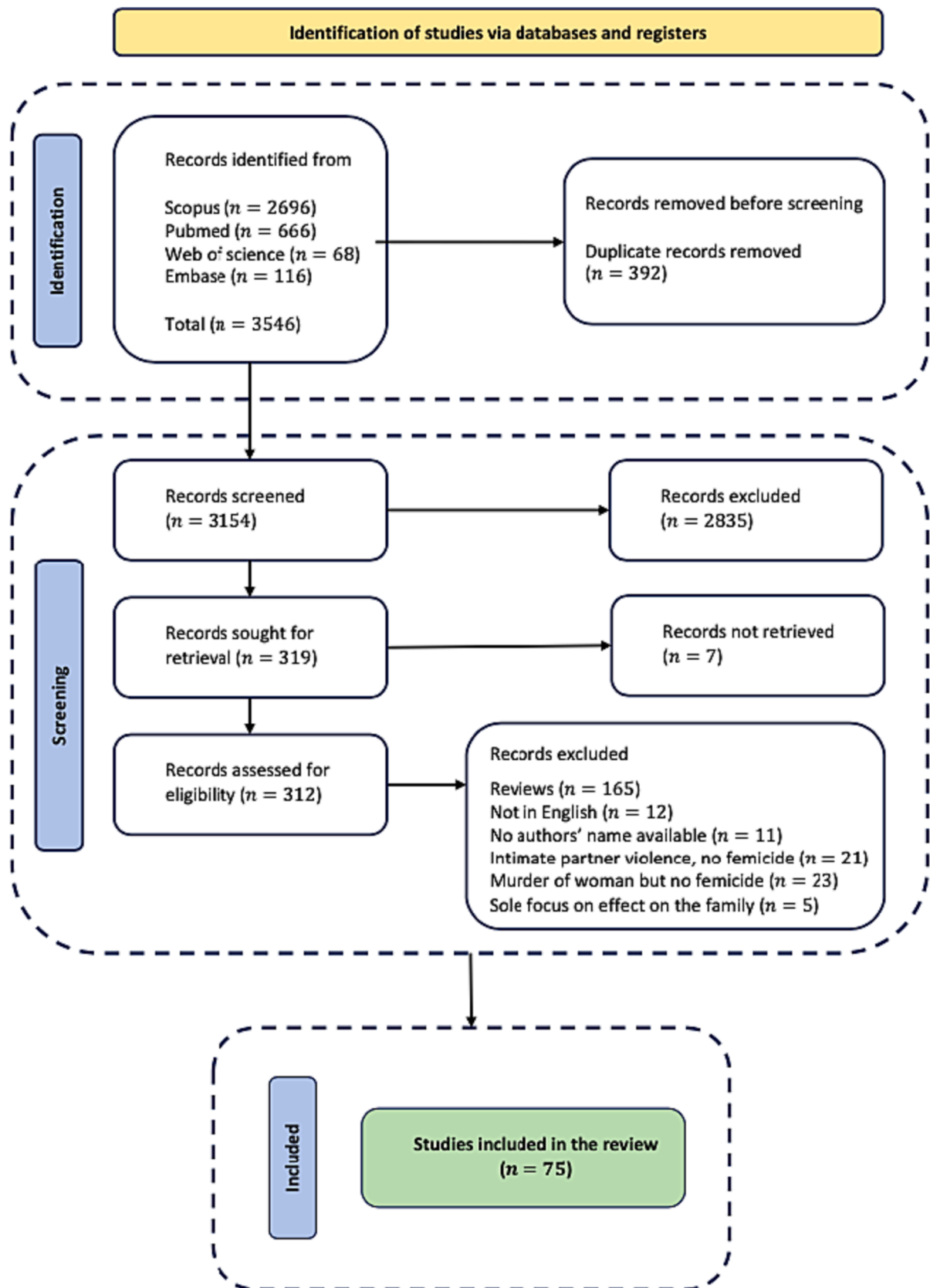


Fig. 1. Flowchart of the selection process performed according to the PRISMA 2020 guidelines for new systematic reviews, which included searches of databases and registered only.

behaviour of the perpetrator, occurring before, during and after the femicide. It constitutes the extreme form of control in which sex is used to degrade the victim to death [4].

The link with the theme of violence is very close, beginning with the myth of Medusa, whose sensuality is punished by the more masculine goddess Athena by her transformation-curse into a monster, just as monstrous becomes the woman who does not place herself in a position of apparent subordination to the male figure in a patriarchal society. Many other of the “uncomfortable” female figures in ancient mythology and literature, such as the Bacchantes or the tenebrous Medea, share with Medusa the dual role of victim (if not of physical violence, at least of social exclusion) and executioner: a pattern that in its repetition manifests the consolidation of an imaginary in which a woman’s ability to exercise any power is inevitably associated with a dimension of dangerousness, and that has continued to recur in the millennia since, making licit and indeed encouraging acts of violence.

Violence is an intentional behaviour, not a fit or loss of control. Within an emotional relationship, it is not a couple’s problem but a problem of who acts it. Violence is not conflict. Conflict presupposes recognising the other and a context of balanced power where one can express anger and argue, but there is no fear. The identity and dignity of each is preserved. In violence, there is unequal power and control over the weaker partner, a unilateral resolution of the problem. Gender-based violence is an “act of war” to humiliate the defeated enemy [5].

Over time, psychoanalysts have wondered about femicide. Bowlby emphasised the subject’s reaction to an insecure attachment experienced in childhood; Kohut to the response to the narcissistic wound inflicted by an abandonment; Bion to the hatred of the psychotic part of the personality towards a symbiotic, manipulative and at times incestuous mother, hatred split from her and acting on the victim; Fonagy to a metalising deficit [6].

Gender-based violence represents a condition characterised by an escalation of tension and violence, which can also lead to lethal outcomes to the detriment of a female exercising the role of woman, that is, mistress of her destiny, and for this reason, killed within a relationship effective, real, or imagined [7]. In this situation, women have no face or name, no role of context except that of the victim. Physical and psychic trauma come together and risk triggering a socio-cultural and inter-generational transmission of trauma and violence. Different emotions outline the victim’s experience or those who remain in psychic pain, anger, anguish, embarrassment, shame, fear, guilt, loneliness, and helplessness [8].

Currently, the members of a relationship (or of a family) need a guiding orientation and clearly understand what it means to be a man or woman, husband or wife. From the subjective perspective of some men, over time, women have, especially at the social level, “invaded” spaces and positions that men have historically held and perceived as their rights, sanctioned and recognised by the symbolic social position occupied by the beginning. Such a perception triggers in men hatred, one of the passions of the human being [7,9].

In this context, hatred as a passion also manifests in terms of jealousy: the other is hated because he steals or robs something that is the prerogative of one’s being born a man. The manifestation of violence turns out to be the means to eliminate “the rival”, in this case, the partner, who becomes the enemy to be killed to restore a dominant position. The perceived invasion by the woman that questions and therefore shakes archaic, supposedly inalienable powers triggers in men that drive for which limits are not admitted [10].

Unconscious dynamics sustain the remarkable increase in femicide rates in the last decades. It can be argued that many times femicide is the unique way to destroy the autonomy, self-esteem, and success of a woman [11]. One out of three women worldwide have experienced physical and sexual violence in their lifetime, with 38 % of all murders of women committed by their partners [12].

Notwithstanding the critical role of new media technologies in empowering vulnerable groups through the generation of new forms of

knowledge, the formation of collective memory, and the elimination of epistemic injustice in opposition to the ruling authorities [13] and the considerable growth of interest on the topic of violence against women in the last years, there is still a limited amount of research that considers factors related explicitly to femicides regarding aggressor, victim, partner’s relationship, and environment associated with women’s deaths [14].

Regardless of regional trends, it is widely recognised that femicide violence constitutes a global public health crisis that requires a preventative response. Femicide violates the fundamental human rights to life, liberty and personal security and is an obstacle to social and economic development. It has been noticed that female victimisation results are closely linked with the structural characteristics of societies, such as gender roles and status and gender inequality. Women continue to bear the heaviest burden of victimisation because of gender stereotypes and inequality. In most cases, there have been observed specific characteristics of women killings across the world: women are disproportionately killed by men; women mostly die in the context of intimate or family relationships; women’s social vulnerability, legal inequality, and low access to education-resulting in gender inequality, stereotypes, and social discrimination-are drivers of violence against women and femicide. It is pivotal to consider that comparing data on femicide in each region of the world is not apparent, as variations between legal definitions and methods of the collection can differ across countries so that accurate counts and/or reliable estimates for the global prevalence of the different types of femicide are unknown and unavailable. What is clear is the fact that in Africa, Asia, countries of the Americas, and Europe, the number of intentional homicides targeting women has increased in the last years [12–14].

According to this framework and precisely to direct research efforts towards factors that can improve the prevention of this phenomenon, it has been proposed that femicide should be defined as the “murder perpetrated because of a failure to recognise the victim’s right of self-determination” which must be shown to be the motive for the crime [1]. This definition could facilitate a homogeneous distinction between what is meant by femicide and what is meant by the murder of a woman to allow a proper collection of data for a shared framing of the phenomenon. It would also make it possible to verify whether establishing injuries and circumstantial patterns representing evidence of a specific murder deserve a clear regulatory structure [2].

We undertook this review to promote discussion among the scientific communities on the definition of femicide and a possible link between femicide and mental disorders. The role of mental health and mental disorders will be distinguished from other cofactors, including drug and alcohol abuse and socio-cultural and socioeconomic factors.

2. Methods

A Systematic Literature Reviews was conducted and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) [15]. The flow diagram of the review is reported in Fig. 1, whereas a detailed description of all the steps is provided below.

2.1. Scope of review and data extraction

This review focuses on the definition of femicides in the scientific literature, explicitly emphasising disentangling mental health deterioration from other cofactors of femicides. In particular, the study included scientific papers that explicitly define or discuss femicides or articles that, albeit not expressly mentioning femicides, thoroughly compare generic homicides and homicides with female victims. A specific data extraction form designed in Excel and exported to Matlab was used to collect and analyse the information for each eligible study. The main research questions that guided the selection of the papers are reported below:

Table 1

Description of the characteristics of the studies included in the systematic review. For each article retrieved for this systematic review, we answered the following questions: **1)** Does the article provide a definition of “femicide”? **1a)** If yes, does it include the denial of a woman’s self-determination? **1b)** If yes, is it different from the murder of a woman? **2)** Does the article deal with mental disorders? **2a)** If yes, does it relate femicide to the murderer’s mental disorders? **3)** Does the article deal with alcohol and drug use? **3a)** If yes, does it relate femicide to alcohol and drug use? **4)** Does the article refer to socio-cultural aspects (honour killing, patriarchy, local traditions, etc.)? **5)** Does the article discuss questionnaires for the psychological assessment and possible risk factors of the murderer? **6)** Does the article relate to femicide and the socio-economic context? **7)** Does the article refer to the psychological effects of femicide on family members and children? **8)** Does the article address femicide-suicide? **9)** Journal scope according to scimagojr.com **10)** Qualitative or quantitative study? **10a)** If quantitative, several number of cases analysed; **11)** Timespan of the collected data.

Author, Country, Year	1, 1a, 1b	2, 2a	3, 3 ^a	4	5	6	7	8	9	10	11
Cecchi R. et al., Italy, 2023 [14]	1: Yes,1a: Yes, 1b: Yes	2: No	3: No	No	No	No	No	No	Forensic Medicine	10: Both, 10a: 46	1990–2020
Santos-Hermoso J. et al., Spain, 2022 [16]	1: No	2: Yes, 2a: Yes	3: No	No	Yes	No	No	No	Biochemistry; Genetics and Molecular Biology; Genetics; Medicine Pathology and Forensic Medicine	10: Both, 10a: 97	NA
Bellizzi S. et al, Italy, 2022 [17]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	No	Obstetrics and Gynecology	10: Quantitative, 10a: 1504	2019 (Europe)-2021 (Italy)
Sela-Shayovitz R., Israel, 2021 [18]	1: No	2: No	3: No	Yes	No	Yes	No	Yes	Pathology and Forensic Medicine; Medicine (miscellaneous); Social Sciences Law; Health	10: Both,10a: 145	2005–2015
Dayan H., Israel, 2021 [19]	1: Yes,1a: No, 1b: No	2: No	3: No	Yes	No	Yes	No	Yes	Clinical and Applied Psychology	10: Both, 10a: 34	2005–2015
Ferrara P., Italy, 2020 [20]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	Yes	No	Psychiatry and Mental Health	10: Both, 10a: 659	2015–2020
Edelstein A., Israel, 2018 [21]	1: No	2: Yes,2a: Yes	3: No	Yes	No	No	No	Yes	Pathology and Forensic Medicine; Applied Psychology	10: Both, 10a: 194	1990–2010
Mata J. et al., Portugal, 2018 [22]	1: No	2: No	3: Yes, 3a: Yes	No	No	No	No	No	Medicine (miscellaneous)	10: Both, 10a: 25	2010–2015
Ayala Quintanilla B. P. et al., Peru, 2016 [23]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	No	Medicine (miscellaneous); Obstetrics and Gynecology	10: Both, 10a: 663	2009–2014
Lysell H. et al., Sweden, 2016 [24]	1: No	2: Yes,2a: No	3: Yes, 3a: Yes	No	No	No	Yes	No	Psychiatry and Mental Health; Medicine (miscellaneous)	10: Both, 10a: 755	1973–2009
Yilmaz E. et al., Turkey, 2015 [25]	1: Yes,1a: No, 1b: No	2: Yes,2a: No	3: Yes, 3a: No	No	No	No	No	No	Pathology and Forensic Medicine; Medicine (miscellaneous); Social Sciences Law	10: Both, 10a: 50	2007–2012
Adinkrah M., Ghana, 2014 [26]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	Yes	No	Yes	Sociology and Political Science; Gender Studies; Social Studies; Law	10: Both, 10a: 35	1990–2009
Sela-Shayovitz R., Israel, 2010 [27]	1: Yes,1a: No, 1b: No	2: No	3: Yes, 3a: Yes	Yes	No	Yes	No	No	Sociology and Political Science; Gender Studies; Social Studies; Law	10: Both, 10a: 174	1995–2007
Kozioł-McLain J., USA, 2006 [28]	1: Yes,1a: No, 1b: No	2: Yes,2a: Yes	3: No	No	Yes	No	No	Yes	Pathology and Forensic Medicine; Medicine (miscellaneous); Social Sciences Law, Health	10: Both, 10a: 666	1994–2000
McFarlane J. et al., USA, 2005 [29]	1: No	2: No	3: Yes, 3a: Yes	No	No	No	No	No	Psychiatry and Mental Health	10: Quantitative,10a: 148	2003
Dawson M., Canada, 2005 [30]	1: No	2: No	3: Yes, 3a: Yes	No	No	No	No	Yes	Clinical psychology; Medicine (miscellaneous); Psychiatry and Mental Health; Public Health, Environmental and Occupational Health	10: Quantitative,10a: 703	1974–1994
Godoy-Paiz P., Guatemala, 2012 [31]	1: Yes1a: No 1b: Yes	2: No	3: No	Yes	Guatemala	No	No	No	Anthropology	10: Qualitative	2000–2012
Sharps P. W. et al., USA, 2001 [32]	1: No	2: No	3: Yes, 3a: Yes	No	No	No	No	No	Clinical psychology; Medicine (miscellaneous); Psychiatry and Mental Health	10: Quantitative,10a: 380	1994–1999
Tosun Altınöz Ş. et al., Turkey, 2018 [33]	1: No	2: Yes,2a: Yes	3: Yes, 3a: Yes	Yes	Yes	Yes	No	No	Applied Psychology; Arts and Humanities (miscellaneous); Pathology and Forensic Medicine	10: Quantitative,10a: 41	2013

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Table 1 (continued)

Author, Country, Year	1, 1a, 1b	2, 2a	3, 3°	4	5	6	7	8	9	10	11
Stout K. D., USA, 1993 [34]	1: No	2: No	3a: Yes 3: Yes, 3a: Yes	No	Yes	No	No	No	Law; Rehabilitation	10: Quantitative,10a: 23	1989
Landau S. F. et al., Israel, 1998 [35]	1: No	2: Yes,2a: No	3: No	Yes	No	Yes	No	No	Law	10: Quantitative,10a: 76	1990–1995
McFarlane J. et al., USA, 1999 [36]	1: No	2: No	3: No	No	Yes	No	No	No	Law; Pathology and Forensic Medicine; Psychology	10: Quantitative,10a: 206	1994–1998
Sharps P. W. et al., USA, 2001 [37]	1: Yes, 1a: No, 1b: No	2: Yes,2a: Yes	3: Yes, 3a: Yes	No	Yes	No	No	No	Epidemiology; Public Health; Environmental and Occupational Health	10: Quantitative,10a: 311	1994–1999
McFarlane J. et al., USA, 2002 [38]	1: No	2: No	3: No	No	Yes	Yes	No	No	Clinical Psychology; Law; Medicine (miscellaneous); Psychiatry and Mental Health	10: Quantitative,10a: 437	1994–2000
Coyne-Beasley T. et al., USA, 2003 [39]	1: No	2: No	3: No	No	Yes	No	No	No	Pediatric; Perinatology and Child Health	10: Quantitative,10a: 90	1990–1995
Frye V. et al., USA, 2005 [40]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	Yes	No	Yes	Law; Pathology and Forensic Medicine; Psychology	10: Quantitative,10a: 1031	1990–1999
Dixon L. et al., UK, 2008 [41]	1: No	2: Yes,2a: Yes	3: Yes, 3a: Yes	No	No	Yes	No	Yes	Applied Psychology; Clinical Psychology	10: Quantitative,10a: 90	1975–2003
Echeburúa E. et al., Spain, 2009 [42]	1: Yes,1a: No, 1b: No	2: Yes,2a: No	3: Yes, 3a: No.	Yes	Yes	Yes	No	No	Psychology; Applied Psychology; Clinical Psychology	10: Both, 10a: 1081	Oct 2005 - Aug 2006
Richards T. N. et al., North Carolina, 2014 [43]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	Yes	Psychology; Clinical Psychology; Social Sciences; Law; Social Sciences (miscellaneous); Sociology and Political Science	10: Qualitative,10a: 405	2002–2009
Cetin I., Turkey, 2015 [44]	1: Yes,1a: Yes, 1b: No	2: No	3: No	Yes	No	No	No	No	Social Sciences; Gender Studies	10: Quantitative,10a: 937	2008–2013
Tütüncüler A. et al., Turkey, 2015 [45]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	No	Medicine; Social Sciences	10: Both,10a: 141	1996–2005
Siegel M.B. et al., U.S. A., 2016 [46]	1: No	2: No	3: No	No	No	No	No	No	Psychiatry and Mental Health; Social Psychology; Social Sciences	10: Both, 10a: 1253	1981–2013
Dekel B. et al., South Africa, 2016 [47]	1: Yes,1a: No, 1b: No	2: No	3: Yes, 3a: Yes	Yes	No	No	No	No	Social Sciences	10: Both, 10a: 7	
Moreschi C. et al., Italy, 2016 [48]	1: Yes,1a: No, 1b: No	2: Yes,2a: Yes	3: Yes, 3a: No	No	No	Yes	No	Yes	Medicine (miscellaneous); Pathology and Forensic MedicineSocial Sciences; Law	10: Both, 10a: 34	1993–2013
Dussich J. P. J., USA, 2016 [49]	1: Yes, 1a: No, 1b: No	2: No	3: No	Yes	No	No	No	No	Social Sciences	10: NA, 10a: NA	NA
Fond W.-L. et al., Taiwan, 2016 [50]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	Yes	Pathology and Forensic Medicine; Social Sciences; Law	10: Both, 10a: 220	2001–2010
Curro Urbano O.M. et al., Peru, 2017 [51]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	No	Forensic Medicine	10: Both, 10a: 1011	2009–2014
Vergel J., Colombia, 2017 [52]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	No	Medicine	10: Both, 10a: 331	2011–2013
Nudelman A. et al., Spain, Romania, and Georgia, 2017 [53]	1: No	2: Yes,2a: Yes	3: No	Yes	No	No	No	Yes	Social Sciences	10: Qualitative,10a: 12	2014–2016
Kapardis A. et al., Cyprus, 2017 [54]	1: Yes,1a: No, 1b: No	2: Yes,2a: No	3: No	No	No	No	Yes	Yes	Social Sciences	10: Qualitative,10a: 14	2001–2014
Ellis D., Canada, 2017 [55]	1: Yes,1a: No, 1b: No	2: No,2a: NA	3: No, 3a: NA	No	No	No	No	Yes	Social Sciences; Law; Sociology and Political Science	10:Qualitative, 10a: NA	NA

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Table 1 (continued)

Author, Country, Year	1, 1a, 1b	2, 2a	3, 3°	4	5	6	7	8	9	10	11
Toprak S. et al., Turkey, 2017 [56]	1: Yes,1a: No, 1b: No	2: Yes,2a: Yes	3: Yes, 3a: Yes	No	No	Yes	No	No	Multidisciplinary	10: Quantitative,10a: 162	Jan 2000- Dec 2010
Freysteinsdóttir F. J., Iceland, 2018 [57]	1: Yes,1a: No, 1b: Yes	2: Yes,2a: Yes	3: Yes, 3a: Yes	Yes	No	Yes	No	Yes	Social Sciences; Sociology and Political Science	10: Quantitative,10a: 11	Jan 1986- Dec 2015
Boira S. et al., Ecuador, 2018 [58]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	Yes	Yes	No	Social Sciences; Sociology and Political Science	10: Qualitative,10a: 12	Jan 2014- Dec 2015
Sela-Shayovitz R., Israel, 2018 [59]	1: Yes,1a: No, 1b: Yes	2: Yes,2a: Yes	3: Yes, 3a: Yes	Yes	No	Yes	No	Yes	Social Sciences; Sociology and Political Science	10: Both, 10a: 463	Jan 2005- Dec 2014
Aguilar-Ruiz R., Spain, 2018 [60]	1: Yes, 1a: No, 1b: Yes	2: Yes,2a: Yes	3: Yes, 3a: Yes	No	No	No	No	Yes	Pathology and Forensic Medicine; Applied Psychology; Social Sciences; Law	10: Both, 10a: 237	1996–2014
Moraga-Contreras C., Chile, 2018 [61]	1: Yes,1a: Yes, 1b: Yes	2: No	3: No	Yes	No	No	No	No	Multidisciplinary	10: Qualitative	NA
Zara G. et al., Italy, 2018 [1]	1: Yes,1a: Yes, 1b: Yes	2: No	3: No	No	Yes	No	No	No	Psychology	10: Quantitative,10a: 275	1970–2016
Caicedo-Roa M. et al., Brazil, 2019 [62]	1: Yes,1a: No, 1b: Yes	2: No	3: No	No	No	No	Yes	No	Medicine (miscellaneous);Public Health; Environmental and Occupational Health	10: Quantitative,10a: 19	2015
Gino S. et al., Italy, 2019 [63]	1: Yes,1a: Yes, 1b: No	2: No	3: No	Yes	No	Yes	No	No	Social Sciences; Law	10: Both, 10a: 275	Jan 1970- Dec 2016
Torrecilla J. L. et al., Spain, 2019 [64]	1: Yes,1a: No, 1b: Yes	2: No	3: No	No	No	No	No	No	Multidisciplinary	10: Quantitative,10a: 655	Jan 2007- Dec 2017
Machado-Rios A. et al., Brazil, 2019 [65]	1: Yes,1a: No, 1b: Yes	2: No	3: No	No	No	No	No	No	Medicine	10: Quantitative,10a: 70	Jan 2010- Dec 2016
Zara G. et al., Italy, 2019 [66]	1: Yes,1a: Yes, 1b: Yes	2: Yes,2a: Yes	3: No	No	No	No	No	Yes	Medicine; Pathology and Forensic	10: Quantitative,10a: 86	1993–2013
Cavlika M. et al., Turkey, 2023 [67]	1: Yes,1a: No, 1b: No	2: Yes,2a: Yes	3: Yes, 3a: No	No	No	No	No	Yes	Pathology and Forensic Medicine; Social Sciences; Law	10: Quantitative,10a: 226	2000–2019
Caicedo-Roa M. et al., Brazil, 2023 [68]	1: No	2: No	3: Yes, 3a: Yes	Yes	No	No	No	No	Public Health	10: Both, 10a: 24	Jan 2018-Dec 2019
Condry R. et al., UK, 2023 [69]	1: Yes,1a: No, 1b: No	2: Yes,2a: Yes	3: No	No	No	No	No	No	Sociology	10: Quantitative,10a: 57	2003–2016
Ortiz-Prado E. et al., Ecuador, 2022 [70]	1: No	2: No	3: No	No	No	No	No	No	Public Health	10: Quantitative,10a: 3236	2001–2017
Zara G. et al., Italy, 2022 [2]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	No	Yes	Psychology	10: Quantitative,10a: 500	1970–2016
Sorrentino A. et al., Italy, 2022 [71]	1: Yes,1a: No, 1b: No	2: Yes,2a: Yes	3: Yes, 3a: Yes	No	No	No	No	Yes	Medicine Public Health; Environmental and Occupational Health	10: Quantitative,10a: 1207	2010–2019
Neves S. et al., Portugal, 2022 [72]	1: Yes,1a: No, 1b: No	2: No	3: No	No	No	No	Yes	No	Social Sciences	10: Quantitative,10a: 71	May 2020-Jul 2020
Cantor E. et al., Chile, 2022 [73]	1: Yes,1a: No, 1b: Yes	2: No	3: No	No	No	No	No	Yes	Social Sciences; Law	10: Quantitative,10a: 1213	Jan 2014-Feb 2020 + Mar 2020-Jun 2021
Giorgetti A. et al., Italy, 2022 [74]	1: Yes,1a: No, 1b: Yes	2: Yes,2a: Yes	3: Yes, 3a: Yes	Yes	No	No	No	No	Forensic Medicine	10: Quantitative,10a: 172	Jan 1950-Dec 2019
Daher-Nashif S., Palestina, 2022 [75]	1: Yes,1a: No, 1b: No	2: No	3: No	Yes	No	Yes	Yes	No	Social Sciences; Law	10: Qualitative	2016

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Table 1 (continued)

Author, Country, Year	1, 1a, 1b	2, 2a	3, 3°	4	5	6	7	8	9	10	11
Camán S. et al., Sweden, 2022 [76]	1: Yes,1a: No, 1b: Yes	2: Yes,2a: Yes	3: Yes, 3a: Yes	No	No	No	No	Yes	Psychiatry	10: Quantitative,10a: 46	Jan 2007-Dec 2009
Neves S. et al., Portugal, 2022 [77]	1:No	2: No	3: No	Yes	No	No	No	No	Social sciences	10: Qualitative	NA
Solinas-Saunders M., Italy, 2022 [78]	1:No	2: No	3: No	Yes	No	No	No	Yes	Medicine; Pathology and Forensic Medicine; Psychology; Social Sciences; Law	10: Quantitative,10a: 2	2015–2019
McLachlan F. et al., Australia, 2022 [79]	1:No	2: No	3: No	No	No	No	No	No	Medicine; Pathology and Forensic Medicine; Applied Psychology; Social Sciences; Public Health; Law	10: Quantitative,10a: 100	2020–2021
Santos-Hermoso, J. Et al., 2022 [80]	1:No	2: Yes,2a: Yes	3: No	No	No	No	No	Yes	Social Sciences; Law	10: Quantitative,10a: 171	2006–2016
Aebi M. F. et al., South America, 2021 [81]	1: Yes, 1a: No, 1b: Yes	2: No	3: No	No	No	No	No	No	Social Sciences; Law	10: Quantitative,10a: 5318	2017–2020
Vignali G. et al., Italy, 2021 [82]	1: Yes,1a: No, 1b: no	2: No	3: No	No	No	Yes	No	No	Forensic Medicine; Social Sciences; Law	10: Quantitative,10a: 86	2006–2020
Potenza S. et al., Italy, 2021 [83]	1:No	2: No	3: No	No	No	No	No	No	Medicine	10: Quantitative,10a: 40	1998–2018
Santos-Hermoso J. et al., Spain, 2021 [84]	1:No	2: No	3: Yes, 3a: Yes	Yes	No	No	No	No	Social Sciences; Law	10: Quantitative,10a: 648	2006–2016
Monteiro M. F. G. et al., Brasil, 2021 [85]	1:No	2: No	3: No	Yes	No	No	No	No	Social Sciences	10: Quantitative,10a: 3157	2016–2018
Nur N., Turkey, 2021 [86]	1:No	2: No	3: No	Yes	No	Yes	No	No	Medicine; Psychiatry and Mental Health	10: Quantitative,10a: 1330	2010–2015
Sorrentino A. et al., Italy, 2020 [87]	1:No	2: Yes,2a: Yes	3: Yes, 3a: Yes	Yes	No	Yes	No	No	Medicine; Public Health; Environmental and Occupational Health	10: Quantitative,10a: 1207	2010–2019

RQ1. What is femicide?

RQ2. Is there a direct relationship between mental health deterioration and femicides?

RQ3. Is the use of drugs and/or alcohol linked to femicides?

RQ4. What are the relationships between femicides and socio-cultural aspects?

RQ5. What is the relationship between femicides and the socio-economic status and context?

2.2. Data sources and searches

The initial search for the existing literature on femicides has been performed in the PubMed, Scopus, Embase, and Web of Science databases. The investigation started on November 1st, 2022, and we then conducted continuous surveillance through article alerts and repeated searches in the abovementioned databases. The last surveillance was performed on April 4th, 2023. A complete list of the research queries used in the various databases.

2.3. Study selection

After removing duplicate records, four investigators independently screened articles by first title and abstract, according to the following pre-specified inclusion criteria:

1. The report explicitly deals with femicides from the title and abstract.
2. The article makes a distinction between homicides by the sex of the victim.

In case criterion 2 was not met or unmet from the title and abstract, the investigators proceeded to review the full text by applying the following exclusion criteria:

1. The article was a systematic literature review or a meta-analysis.
2. Not even the abstract of the article was available in English.
3. The article was about the killing of women but did not consider the specificity of femicides.
4. The article was about femicides, but its only focus was on their effects on family members, particularly children.
5. The report covered intimate partner violence and/or rape without the murder of a woman.

Discussion and consultations with the other investigators were necessary for the presence of disagreement between the four investigators. In particular, investigators deepened some of the content by confronting each other on those selected articles where doubt could arise about as to whether the work actually dealt with real femicides or merely homicides of women. In addition, we discussed if possible, whether linkages to mental disorders had determined the homicidal behavior or not, whether alcohol use was related to mental disorders or was just alcohol abuse. We also analysed the studies under consideration to verify that the methodological framework could be deemed reliable, and eventually if to expand the subject addressing the post-traumatic mental disorders of survivors.

2.4. Data synthesis

Through data extraction, articles considered femicides in various contexts, using different tools and methods for investigation (e.g. surveys, questionnaires, interviews etc.). Given the heterogeneity of the information gathered, data synthesis was conducted only qualitatively for these reasons.

3. Results

3.1. Results of the search strategy

A total of 3546 articles were retrieved from the four databases. After deleting duplicates, the remaining 3154 records were screened by title and abstract. 319 publications required full-text review before a decision could be made. Seventy-five studies [2,3,4,16–87] fulfilled the eligibility criteria and were included in the systematic review. Details on the selection process are reported in the flow diagram in Fig. 1, and the selection outcome is reported in Table 1. In the excluded records section of Fig. 1, “murder of women but not femicide” means killing women regardless of gender (e.g., robbery, massacre).

RQ1. What is femicide? The first use of the word femicide can be traced back to 1974 when the writer Carol Orlock prepared an (unpublished) anthology of femicide [88]. Its current definition provided by the WHO reads, “Femicide is generally understood to involve the intentional murder of women because they are women, but broader definitions include any killings of women or girls” [89]. The definition is necessarily wide to encompass the heterogeneous definition across countries and scholars. Here, we will further delve into the definitions in the 75 selected manuscripts. Out of these 75, 47 provided an explicit definition of femicide [2,3,4,14,17,19,20,23,25,27,28,31,37,40,42–45,47–52,54–67,69,71–76,81,82]. The broader definition of femicide has been considered in [40,42,50,51,56], where all homicides whose victims are women are classified as femicides. Other works have instead also considered the gender motive, defining femicide as a lethal expression of violence with gender-based drivers [4,17,23,25,31,48,49,52,58,61,62,69,72–75,81,82], so to distinguish it from the incidental killing of a female during, e.g., robbery. Such a definition is legal in countries like, e.g. Spain, Panama, and Paraguay, as pointed out in a study on six Spanish-speaking countries, emphasizing how such a definition is difficult to implement [81].

Other works have further specified the definition of femicide and specifically referred to homicides of women explicitly related to denying a woman’s self-determination [3,14,44,61,63,66]. For instance, it introduces the term “revolt killing” as the outcome of a conflict between women’s the new status of women and men’s the traditional status of men, by femicide studies in modern Turkey [44]. Similarly, in their research, Zara et al. [3] in their study describe femicide as the extreme for silencing the individual and disabling dignity, liberty, and rights. In contrast, Gino et al. [63] focus on femicide as an extreme form of intimate partner violence (IPV), often preceded by a destructive relationship with the partner who aims at taking control over the victim. Indeed, the perpetrator of femicide may have a sense of ownership, hate, and disdain concerning the victim [66].

Different, more quantitative arguments were used in the implicit definitions provided by other works focusing on specific types of femicides. For instance, it was observed that in most of the homicides where the perpetrator then committed suicide, the victim was a woman, and therefore classified such cases as femicide-suicide cases [19,28,43]. Following a similar argument, the observation that, whereas men are most likely to be killed by strangers or acquaintances, women are most likely to be killed by an intimate partner or close relatives, such type of homicides has been classified as intimate partner femicide or, more generally, intimate femicide [27,37,47,54,57,59,60,64,65,71,76]. Intimate partner femicide-suicide (IPF-S) has been ranked as femicide-suicide where the perpetrator is a close partner [67,71].

RQ2. Is there a direct relationship between mental health deterioration and femicides? The mental health of victims and perpetrators of femicides has often been explored as a possible risk factor. For instance, in a study on 311 femicides in the United States, it was observed that 30.8 % of the victims and 55.1 % of the perpetrators were reported to have a fair or poor mental health status [37]. Out of the 75 considered articles, 25 discussed mental disorders as possibly related to femicides occurrence [16,21,24,25,28,33,35,37,41,42,48,53,54,56,57,59,60,66,67,69,71,74,76,80,87].

This possible relationship has been explored mainly concerning the perpetrator’s mental health. Research has been undertaken with different approaches in the literature, and their results are somewhat contradictory.

The first subset of work points to the lack of a clear association between femicides and the psychopathy of the perpetrator. For instance, Santos-Hermoso et al. [16] analysed 97 cases of femicide in Spain and evaluated the degree of psychopathy of the perpetrators using the Psychopathy Checklist-Revised (PCL-R). The results of the study emphasised that, albeit previous studies showed that high scores in psychopathy are associated with acts of violence, perpetrators of femicide in Spain exhibited low scores. However, no attempt was made to establish causal relationships. In the same vein, a study conducted on 41 male prisoners incarcerated due to femicides in Turkey showed that the childhood trauma and psychopathology of the prisoners were not different from the control groups [33]. A study on a sample of 79 IPF also showed that the incidence of mental disorders among the perpetrators was not different from that of a control sample of non-IPF. The cases in which the murder was affected by psychopathy involved children who had killed their mothers, as shown in the study of Cecchi et al. [2]. The authors did not regard this as femicide but as the murder of a woman since it could have also affected the father.

Other studies seem instead to point in the opposite direction. In their paper, Lysell et al. [24] focused on 291 male perpetrators of IPF and used as a control group all-male non-IPF homicides. Multivariate logistic regression showed that mental disorders were a significant risk factor for IPF. A possible way of reconciling such contrasting results may lay in the fact that the mental disorder of the perpetrators may be a risk factor only for certain types of femicides and that there are different perpetrators’ profiles [80]. For instance, it is focused on a sample of 46 IPH and 133 homicides of men on other men (MMH) [76]. Authors showed that, albeit no difference was found overall with the mental disorder incidence in the control group, previous suicide attempts and suicide ideation were more prevalent in perpetrators of femicide-suicide. Similar results were reported in another study [28], where the authors showed on a cohort of 67 cases and control of 356 women with nonfatal physical abuses that prior perpetrator suicides threat are at risk factor for femicide-suicide. Besides, the results of the article of Sorrentino et al. [71] suggest how the authors’ psychological well-being may play a relevant role in the decision to commit suicide after IPF.

RQ3. Is the use of drugs and/or alcohol linked to femicides? The use of substances is typically associated with a higher prevalence of violent behaviour, and 26 % of the victims of violent crime reported that the offender was using alcohol or drugs [90]. However, understanding whether the use of substances increases the risk of femicides more than other types of homicide is still being investigated and debated, and data on whether the perpetrator was under the influence is typically difficult to collect [30,56]. In our study, we found that, out of the total 75 analysed manuscripts, 25 discussed the potential relationship between femicides and the use of drugs and alcohol [22,24,25,27,29,30,32–34,37,41,42,47,48,56,57,59,60,67,68,71,74,76,84,87].

In their study in Turkey [33], the authors found no significant difference in substance use between prisoners guilty of femicide and a control group. Similarly, Lysell et al. [24] did not find substance use as more prevalent among perpetrators of IPF. On the contrary, they observed that substance use disorder is a risk factor for non-IPF

homicide, as reported in the article of Caman *et al.* [76] when comparing IPF and MMH. These findings can be explained by considering the most common definitions of femicide, which exclude the incidental killing of women during criminal activities. For instance, the cases in which the murderer was a drug addict involved children who killed their mothers for economic reasons [2] were not considered femicides. Additionally, a cluster analysis performed, in the study of Aguilar-Ruiz *et al.* [60], on 237 cases of femicides in Spain showed that only one of the four identified profiles of the perpetrator of femicide is characterised by the use of substances.

Sharps *et al.* in their article [32] performed a different type of comparison in their article [32], which compared the perpetrator use of alcohol and drug in a cohort of 380 femicide/attempted femicide victims in 10 US cities between 1994 and 1999 against a control group of 384 abused women. Interestingly, they found both the use of alcohol and drugs by both the perpetrator and the victim positively associated with femicides/attempted femicide. In line with these findings, Dixon *et al.*'s their paper [41] focused on a sample of 1,081 male batterers distributed in 269 cases of femicides or severe violence and 812 less severe cases, constituting the control group. The authors found an association between alcohol abuse/drug use and the severity of the cases. The fact that women's substance use is a potential factor favouring their victimization was highlighted by Caicedo-Roa *et al.* in their work [68].

Other works focused on more specific questions relating to substance abuse and femicides. For instance, within IPF, the authors identified that psychoactive substance use is negatively associated with the subsequent suicide of the perpetrator [71]. This finding could be explained by considering that psychoactive substances may alter the mental balance of the perpetrator fostering suicidal tendencies. Instead, the research of Santos-Hermoso *et al.* [84] tried to uncover significant differences between femicides preceded or not preceded by a separation and observed a higher prevalence of drug consumption by perpetrators in femicides preceded by a break. A possible explanation of this observation is that drug use may also be one of the reasons for the separation.

RQ4. What are the relationships between femicides and socio-cultural aspects? Socio-cultural aspects are often considered one of the main drivers of femicides, as well as one on which much can be done in terms of prevention through education and social initiatives [91]. Indeed, femicides are often favoured by the public authorities' inability or willingness to punish the perpetrators and prevent the crime, fostered by the social backdrop [31]. Infanticides of girl babies due to the preference for sons, bride burning of young brides, and honour killings of adulterous wives in South Asia and the Middle East are all examples of the abominable crimes often justified in the name of socio-cultural traditions [49]. For instance, in South Africa, Dekel and Andipakin studied the case of seven women subject to intimate partner violence (IPV) and, using open-ended interviews and discourse analysis, showed how the particular social context influenced their perception of their abusive relationships [47]. Indeed, the women tended to underestimate the risk of femicide and justify the abusive partner's behaviour with hegemonic gender, dark romance, and patriarchal discourse. Studies conducted in Africa and Asia agree in stating that many victims of femicide still go uncounted-given inconsistencies in definitions and criteria amongst countries- because there is not enough information to identify them as femicide. Women and girls were more at risk of being killed by their intimate partners or other family members, and the root causes of violence against women and girls include harmful masculinities, social norms, and eliminating structural gender inequalities and gender stereotypes. While Asia is the region with the largest absolute number of killings, Africa is the region with the highest level of violence relative to the size of its female population.

Among the work outcome of this systematic review, 25 out of the total 75 dealt with the link between socio-cultural aspects and femicides [18,19,21,27,31,33,35,42,44,47,49,53,57,59,61,63,68,74,75,77,78,84–87].

In the study on 41 convicted femicides in Turkey, Tosun Altınöz *et al.*

showed how the male-dominant view of societal gender roles is one of the significant differences between the control group [33]. This is in line with the definition of revolt killing, instead of the more traditional honour killing [86], used by Cetin *et al.* [44] to describe femicides in modern Turkey, where men see their classic status challenged by the increasing achievements of women in society.

Socio-cultural specificities play a relevant role in the Israeli society, composed of the Jewish majority and a non-Jewish, mainly Muslim minority, with an appropriate immigration inflow in the 1990s from the former Soviet Union and Ethiopia [18,19]. These two immigrant populations encountered difficulties in adjusting to the new environment and markedly Ethiopian immigrants. Research on different timespans reflected an over-representation of these immigrant groups as perpetrators of femicides [18,19,21,27,35]. As more recent years are considered, the prevalence of femicides among former Soviet Union immigrants became like that of the overall Israeli population, probably due to a better adjustment to the new environment. Indeed, the over-representation of both immigrant groups was only observed in two studies [35,27], which considered femicides between 1990 and 1995, and between 1995 and 2007. Dayan [19] focused on 34 femicide-suicides between 2005 and 2015. He noticed that only a minority of Ethiopian immigrant Jews that is overrepresented as the perpetrator of femicides (32% of the total) compared to its share (a modest 2%) in the total population, but the same does not apply to immigrants from the former Soviet Union, who better adjusted to the new. He also provided the plausible explanation that the "...disintegration of traditional norms and social mechanisms that followed the Ethiopian Jews' efforts to become part of the dominant Israeli culture..." and analysis of court decisions suggest intimate partner jealousy as an overrepresented trigger of femicide within Ethiopian immigrants [21]. In addition, Sela-Shayovitz *et al.* [18], according to their how stated in his previous study [27], noted that Ethiopian immigrants more commonly commit suicide than other ethnic groups. The dependency on the sociocultural context of this finding is testified by the fact that, for instance, a study framed in Italy, which has different immigration patterns compared to Israel, shows opposite results, with intimate femicide suicides less likely than intimate femicides without suicide when the perpetrators were immigrants [78].

Differently, sociocultural aspects were not relevant in femicides in Iceland, according to a study framed between 1986 and 2015. However, the limited size of the sample does not allow for drawing significant definitive conclusions [57].

RQ5. What is the relationship between femicides and the socio-economic status and context? The socioeconomic well-being of the victim and the perpetrators may affect the femicide rates. This relationship is sometimes strictly interlaced with sociocultural factors. This is the case, for instance, of Israel, where the Ethiopian male immigrants suffered economic hardship since they lacked professional skills suitable for the Israeli labour market, encountered difficulty finding employment and saw their patriarchal status threatened [18,19,27,35]. This fostered resentment and built and reinforced violent behaviour against women, eventually leading to high rates of femicide compared to the general population. The possible relationship has been explored in 19 of the 75 papers we analysed, with different theories and findings.

For instance, a study in Ghana on femicides from 1990 to 2009 showed how the perpetrators belonged to a low socioeconomic class compared to their victims [26], which may indicate again sociocultural difficulties for men to accept the existence of a wealthier and more successful woman.

In the study on 41 convicted femicide in Turkey, it was observed that the unemployment rate was higher than in the control group [33]. In another study of the Turkish case of 161 femicides between 2000 and 2010, it was observed that unemployment was not uniform across IPF (80) and non-IPF cases (81), with higher unemployment rates in non-IPF perpetrators [56]. The severity of the violence was instead not associated with the socioeconomic level in the study on 1,081 male batterers

in Spain [42].

Concerning the victims, we report a result from McFarlane et al., who performed a study on 437 femicide / attempted cases in 10 US cities between 1994 and 2000 and compared them with 384 abuse victims in the same timespan as a control group [38]. They found that (attempted) femicide victims were more likely to be unemployed than the control group. As demonstrated, numerous non-clinical factors, i.e. social determinants of health (economic and social conditions that influence individual and group differences in health status) may be among the factors fueling violence and, in particular, on vulnerable groups of the population.

4. Discussion

Femicide is the consequence of a lethal mix of cultural, personal, educational, social and economic context and pathological aspects, for which, beyond some common symptoms, it is necessary to keep in mind the single and unrepeatable history of the protagonists. Moreover, it should not be forgotten that the partner's killing or the violence committed against her often occurs when the relationship is still ongoing, not necessarily because of its breakup. We must not act on the emergency but act on policies aimed at prevention, trying to create a cultural 'deconstruction' of violence through a real determination of women. As we know, social determinants can represent increasing violence (i.e. illiteracy, precarious housing and economic conditions, living in a state of vulnerability). These elements affect women's health and amplify risk factors.

Granted that the principle that action must be taken first and foremost on the emergency remains inescapable, however, it must be considered that it is also necessary to act on the causes because even when a woman denounces and separates from the perpetrator, the latter often repeats patterns of violent behaviour in subsequent relationships. Furthermore, although a denunciation can, in most cases, have a containing effect in the short term, in the medium and long term, this works very little.

The term "femicide", originally coined to refer to the intentional killing of women or girls because they are female, has been enriched and modified with definitions varying based on cultural context [1]. In fact, in some cases, this term is used to indicate all types of homicides in which victims are women. In contrast, in other cases, it is used to express homicidal violence on a gender basis, to express male dominance versus female vulnerability. Besides, it has been observed that many forms of femicide emerge worldwide as people's values, beliefs, attitudes, and behaviours evolve (intimate partner femicide, femicide-suicide, religious femicide, honour femicide, revolt femicide) [92]. All these variables risk making the concept of femicide sometimes confusing or inappropriate to the context it refers to. For this reason, some authors have proposed to specifically link this term to homicides of women explicitly related to denying a woman's self-determination [2,3,14,44,61,63,66]. In such a perspective, femicide assumes the meaning of a violent attack on a woman's liberty, autonomy, and dignity, specifically silencing and destroying the victim forever.

To persist, passion must respect what contradicts it most: the freedom and self-determination of its object. Violence breaks away from power when the erotic relationship collides with the lovers' narcissistic wounds. Sometimes, however, the relationship, characterized by the victim and her perpetrator, represents a collusive dyad in which one keeps the power or submission of the other alive and vice versa.

Male anger, much more inclined to transform into harmful physical aggression, degenerates to the point where it directly expresses social inequality. Violence, hatred, and contempt are revealed whenever the woman is not found where a man places her. There is a paradox: the more female emancipation advances, the more men lose their identity and persecute women. Violence can become an impulse of annihilation in fragile men in whom the power over women, which society assigns to them, precariously covers the profound impotence to desire and be

desired. The male element loses its erotic character and invades the female aspect of her subjectivity as an inert mass, suffocating her.

Research focusing on the author's mental health has yielded very mixed results. However, a consensus conclusion is that only a tiny, statistically insignificant percentage of femicide occur at the hands of individuals with diagnosed mental disorders. Indeed, it is necessary to distinguish between a crime "of" a person with a mental illness and the same offence crime "in" a person with a mental illness. The difference between "in" and "of" is crucial. For example, the 'murder of a woman "ordered" by auditory hallucinations to an individual with psychosis cannot be considered femicide but as murder "of" a person with a mental disorder. Indeed, in this case, there is a close causal link between murder and mental disorder. In contrast, if an individual suffering from psychosis, regardless of hallucinations or delusions, kills a woman to restrict her self-determination, it is femicide "in" a person who, among other things, is also suffering from a psychiatric disorder and, in this case, there is no causal link with the mental disorder. Therefore, it is not possible to conclude the presence of causal relations between femicide and psychiatric disorders [16,33].

Gender-based violence phenomena, such as stalking, rape, and femicide, can present comorbidity with psychiatric diseases [76]. The key to understanding this behaviour can be identified in the absence of a relationship and inaccessibility to intimacy and emotional exchange. Individuals suffering from psychiatric illness may be deficient in empathic skills. Sometimes these persons fail to decode, feel, understand, and share the thoughts, feelings, emotions, and experiences of others and respond appropriately. Nonetheless, it is also essential to consider the anti-stigma message of the study conducted by Rodway et al. [93], where it was highlighted, that people affected by mental illnesses could be perpetrators but also victims of homicides.

Similar controversies exist regarding the possible link between femicide and the use of drugs and/or alcohol [32–34]. Sometimes it emerges that domestic violence and alcohol or substance dependence are unrelated [32]; some studies have found that light drinking patterns are linked with adaptive marital functioning [94]; however, some researchers point out that only a minority of people who drink alcohol become aggressive [95], whereas other studies suggest that this combination must be taken into account, considering it a risk factor for violence within the couple [96].

Alcohol abuse may precipitate violence when other risk factors, such as personality disorders (antisocial and borderline) or depression, are present [97].

Alcohol and other abused substances can also act decisively concerning committing violent behaviour. Alcohol consumption reduces cognitive control and narrows perception: these factors can lead to an increased propensity for violent conduct in certain situations. In the case of substance abusers, some research has found that the temperamental trait sensation seeking, low inhibitory control and poor control of aggression predispose to violent behaviour [98,99].

The hypothesis that alcohol or substances can represent a risk factor that assists and triggers violence in a couple remains controversial. In summary, alcohol intoxication or substance abuse is rarely the only explanation for violence unless associated with traits prone to violence tout court. The intake of alcoholic substances, the problems related to the couple's breakup, the separation phase, and the "futile reasons" emerge as important causes, concurrent causes, or occasions of violence in the family.

The social and cultural context inevitably affects the risk of femicide, particularly in predominantly patriarchal communities, when men see their traditional status challenged by the increasing achievements of women in society [44] or immigration patterns that entail difficulties in adjusting to new environments [27]. A low socio-economic status can trigger violence against women, mainly when the victim results wealthier [38]. The origin of violence against women has its roots in ancient times through patriarchal myths and repression of the feminine, seen as obscure and threatening. The unconscious fear of the woman

- [20] P. Ferrara, Femicide in Italy in the last years: a devastating human rights violation, *Minerva Psichiatr.* 61 (3) (2020) 103–105, <https://doi.org/10.23736/S0391-1772.20.02057-9>.
- [21] A. Edelstein, Intimate partner jealousy and femicide among former Ethiopians in Israel, PMID: 27329146, *International Journal of Offender Therapy and Comparative Criminology* 62 (2) (2018) 383–403, <https://doi.org/10.1177/0306624X16652453>.
- [22] J. Mata, J., A. Sani, C. Soeiro, Forms of violence prior to femicide in abusive intimate relationships, in: *Annals of Medicine*, Vol. 50, Taylor & Francis LTD, Oxon, England, 2018, pp. S137–S138.
- [23] B.P. Ayala Quintanilla, A. Taft, S. McDonald, W. Pollock, An examination of femicides in Peru between 2009 and 2014, PMID: 27496802, *Int. J. Gynecol. Obstet.* 134 (3) (2016) 342–343, <https://doi.org/10.1016/j.ijgo.2016.03.020>.
- [24] H. Lysell, M. Dahlin, N. Långström, P. Lichtenstein, B. Runeson, Killing the mother of one's child: psychiatric risk factors among male perpetrators and offspring health consequences, *J. Clin. Psychiatry*, 77(3) (2016). PMID: 26797563 10.4088/JCP.14m09564.
- [25] E. Yilmaz, B. Kumral, N. Canturk, Z. Erkol, A.M. Okumus, Analysis and comparison of domestic femicide cases in the cities of Diyarbakir & Tekirdag, Turkey: A preliminary study, PMID: 26165653, *J. Forensic Leg. Med.* 34 (2015) 17–23, <https://doi.org/10.1016/j.jflm.2015.04.018>.
- [26] M. Adinkrah, Intimate Partner Femicide-Suicides in Ghana: Victims, Offenders, and Incident Characteristics, PMID: 25261436, *Violence Against Women* 20 (9) (2014) 1078–1096, <https://doi.org/10.1177/1077801214549637>.
- [27] R. Sela-Shayovitz, The Role of Ethnicity and Context: Intimate Femicide Rates Among Social Groups in Israeli Society, PMID: 21164218, *Violence Against Women* 16 (12) (2010) 1424–1436, <https://doi.org/10.1177/1077801210389579>.
- [28] J. Koziol-McLain, Risk Factors for Femicide-Suicide in Abusive Relationships: Results from a Multisite Case Control Study, *Violence Vict.* 21 (1) (2006) 3–21. PMID: 16494130.
- [29] J. McFarlane, A. Malecha, J. Gist, K. Watson, E. Batten, I. Hall, S. Smith, Intimate partner sexual assault against women and associated victim substance use, suicidality, and risk factors for femicide, PMID: 16203648, *Issues Ment. Health Nurs.* 26 (9) (2005) 953–967, <https://doi.org/10.1080/01612840500248262>.
- [30] M. Dawson, Intimate femicide followed by suicide: Examining the role of premeditation, PMID: 15843325, *Suicide Life Threat. Behav.* 35 (1) (2005) 76–90, <https://doi.org/10.1521/suli.35.1.76.59261>.
- [31] P. Godoy-Paiz, Not Just “Another Woman”: Femicide and Representation in Guatemala, *Journal of Latin American and Caribbean Anthropology* 17 (1) (2012) 88–109, <https://doi.org/10.1111/j.1935-4940.2012.01192.x>.
- [32] P.W. Sharps, J. Campbell, D. Campbell, F. Gary, D. Webster, The role of alcohol use in intimate partner femicide, *Am. J. Addict.* 10 (2) (2001) 122–135.
- [33] Ş. Tosun Altınöz, A.E. Altınöz, Ç. Utku, A. Eşsizöglü, S. Candansayar, Femicide: psychosocial characteristics of the perpetrators in Turkey, PMID: 29552910, *Int. J. Offender Ther. Comp. Criminol.* 62 (13) (2018) 4174–4186, <https://doi.org/10.1177/0306624X18763765>.
- [34] K.D. Stout, Intimate femicide: A study of men who have killed their mates, *J. Offender Rehabil.* 19 (3–4) (1993) 81–94, https://doi.org/10.1300/J076v19n03_05.
- [35] S.F. Landau, S. Hattis Rolef, Intimate femicide in Israel: temporal, social, and motivational patterns, *Eur. J. Crim. Policy Res.* 6 (1998) 75–90.
- [36] J.M. McFarlane, J.C. Campbell, S. Wilt, C.J. Sachs, Y. Ulrich, X. Xu, Stalking and intimate partner femicide, *Homicide Stud.* 3 (4) (1999) 300–316, <https://doi.org/10.1177/1088767999003004003>.
- [37] P.W. Sharps, J. Koziol-McLain, J. Campbell, J. McFarlane, C. Sachs, X. Xu, Health Care Providers' Missed Opportunities for Preventing Femicide, PMID: 11676577, *Prev. Med.* 33 (2001) 373–380, <https://doi.org/10.1006/pmed.2001.0902>.
- [38] J. McFarlane, J.C. Campbell, K. Watson, Intimate partner stalking and femicide: Urgent implications for women's safety, PMID: 12030246, *Behav. Sci. Law* 20 (1–2) (2002) 51–68, <https://doi.org/10.1002/bsl.477>.
- [39] T. Coyne-Beasley, K.E. Moracco, M.J. Casteel, Adolescent femicide: a population-based study, PMID: 12695231, *Arch. Pediatr. Adolesc. Med.* 157 (4) (2003) 355–360, <https://doi.org/10.1001/archpedi.157.4.355>.
- [40] V. Frye, V. Hosein, E. Waltermaurer, S. Blaney, S. Wilt, Femicide in New York City: 1990 to 1999, PMID: 18556618 PMID: PMC2446466, *Homicide Stud.* 9 (3) (2005) 204–228, <https://doi.org/10.2105/AJPH.2007.112813>.
- [41] L. Dixon, C. Hamilton-Giachritsis, K. Browne, Classifying partner femicide, PMID: 18087033, *J. Interpers. Violence* 23 (1) (2008) 74–93, <https://doi.org/10.1177/0886260507307652>.
- [42] E. Echeburúa, J. Fernández-Montalvo, P. de Corral, J.J. López-Goní, Assessing Risk Markers in Intimate Partner Femicide and Severe Violence: A New Assessment Instrument, PMID: 18544750, *J. Interpers. Violence* 24 (6) (2009) 925–939, <https://doi.org/10.1177/0886260508319370>.
- [43] T.N. Richards, L. Kirkland Gillespie, E.M. Givens, Reporting Femicide-Suicide in the News: The Current Utilization of Suicide Reporting Guidelines and Recommendations for the Future, *J Fam Viol* 29 (2014) 453–463, <https://doi.org/10.1007/s10896-014-9590-9>.
- [44] I. Cetin, Defining Recent Femicide in Modern Turkey: Revolt Killing, *J. Int. Women's Stud.* 16 (2) (2015) 346–360.
- [45] A. Tütüncüler, E. Özer, Y.M. Karagöz, F.Y. Beyaztas, Evaluation of Femicide Cases Committed Between the Years 1996–2005 in Antalya, PMID: 26625512, *OMEGA—Journal of Death and Dying* 71 (2) (2015) 198–210, <https://doi.org/10.1177/0030222815570600>.
- [46] M.B. Siegel, E.F. Rothman, Firearm ownership and the murder of women in the United States: evidence that the state-level firearm ownership rate is associated with the nonstranger femicide rate, *Violence and Gender* 3 (1) (2016) 20–26, <https://doi.org/10.1089/vio.2015.0047>.
- [47] B. Dekel, M. Andipatin, Abused Women's Understandings of Intimate Partner Violence and the Link to Intimate Femicide, *FQS Forum Qualitative Sozialforschung* 17 (1) (2016), <https://doi.org/10.17169/fqs-17.1.2394>.
- [48] C. Moreschi, U. Da Broi, V. Zamai, F. Palese, Medico legal and epidemiological aspects of femicide in a judicial district of north eastern Italy, PMID: 26854852, *J. Forensic Leg. Med.* 39 (2016) 65–73, <https://doi.org/10.1016/j.jflm.2016.01.017>.
- [49] J. P. J. Dussich, Blue Victimology and Femicide: The United Nations' Response to Victims and Female Victims of Gender Killings, in *Women and Children as Victims and Offenders: Background, Prevention, Reintegration*, Eds. H. Kury, S. Redo, E. Shea, Springer, Switzerland, Part I (2016) 47–66.
- [50] W.-L. Fond, C.-H. Pan, J.C. Lee, T.-T. Lee, H.-L. Hwa, Adult femicide victims in forensic autopsy in Taiwan: A 10-year retrospective study, PMID: 27235593, *Forensic Sci. Int.* 266 (2016) 80–85, <https://doi.org/10.1016/j.forsciint.2016.05.008>.
- [51] O.M. Curro Urbano, N. Pastor Ramirez, E.M. Hernandez, Huaripaucar, C. L. Chauca Saavedra, G.M. Puza Mendoza, M. Córdova Delgado, M.P. Quispe Llanzo, A.E. Oyola García, Extreme violence against women and femicide: from the intimate scene to the human trafficking in Peru, *Cuad Med Forense* 23 (1–2) (2017) 15–23.
- [52] J. Vergel, A.-C. Trompetero-González, The magnitude of the injury pattern in femicides by stabbing in Colombian women, *Rev Fac Med* 65 (4) (2017) 559–563, <https://doi.org/10.15446/revfacmed.v65n4.61615>.
- [53] A. Nudelman, S. Boira, T.T. Tsomaia, E. Balica, S. Tabagua, “Hearing their voices”: exploring femicide among migrants and culture minorities, *Qual. Sociol. Rev.* 13 (3) (2017) 48–68, <https://doi.org/10.18778/1733-8077.13.3.04>.
- [54] A. Kapardis, A.C. Baldry, M. Konstantinou, A Qualitative Study of Intimate Partner Femicide and Orphans in Cyprus, *Qual. Sociol. Rev.* 13 (3) (2017) 80–100, <https://doi.org/10.18778/1733-8077.13.3.06>.
- [55] D. Ellis, Marital Separation and Lethal Male Partner Violence, PMID: 27169725, *Violence Against Women* 23 (4) (2017) 503–519, <https://doi.org/10.1177/1077801216644985>.
- [56] S. Toprak, G. Ersoy, Femicide in Turkey between 2000 and 2010, PMID: 28832596 PMID: PMC5568387, *PLoS One* 12 (8) (2017), <https://doi.org/10.1371/journal.pone.0182409>.
- [57] F.J. Freytsjordóttir, Femicide in a small Nordic welfare society: the case of Iceland, *Journal of Comparative, Soc. Work* 13 (1) (2018) 35–56, <https://doi.org/10.31265/jcsw.v13i1.158>.
- [58] S. Boira, A. Nudelman, Professionals' support role for survivors of femicide and relatives of victims: The case of Ecuador, *J. Comparative Soc. Work* 13 (1) (2018) 81–102, <https://doi.org/10.31265/jcsw.v13i1.160>.
- [59] R. Sela-Shayovitz, “She knew he would murder her”: The role of the media in the reconstruction of intimate femicide, *Journal of Comparative, Soc. Work* 13 (1) (2018) 11–34, <https://doi.org/10.31265/jcsw.v13i1.157>.
- [60] R. Aguilar-Ruiz, Tipologías de Femicidas con Trastorno Mental en España, *Anuario de Psicología Jurídica*, 28(2018) 39–48. <https://doi.org/10.5093/anp2018a4>.
- [61] C. Moraga-Contreras, C. Pinto-Cortez, The Short-Sighted Legal Treatment of Femicide in Chile. An Analysis in Light of Gender Perspective, *Interciencia* 43 (7) (2018) 468–474.
- [62] M. Caicedo-Roa, R. Carlos Cordeiro, A.C. Alves Martins, P.H. de Faria, Femicides in the city of Campinas, São Paulo, Brazil, Reports, PMID: 31291425, *Public Health* 35 (6) (2019), <https://doi.org/10.1590/0102-311X00110718>.
- [63] S. Gino, F. Freilone, E. Biondi, D. Ceccarelli, S. Veggi, G. Zara, From Intimate Partner Violence to Femicide: relationships that kill, *Rassegna Italiana Di Criminologia* 13 (2) (2019), <https://doi.org/10.7347/RIC-022019-p131>.
- [64] J.L. Torrecilla, L. Quijano-Sánchez, F. Liberatore, J.J. López-Ossorio, J. L. González-Álvarez, Evolution and study of a copycat effect in intimate partner homicides: A lesson from Spanish femicides, PMID: 31170250 PMID: PMC6553786, *PLoS One* 14 (6) (2019), <https://doi.org/10.1371/journal.pone.0217914>.
- [65] A. Machado-Rios, M. Martini, K. Cardoso-Crespo, A. Fraga-Morales, P.V. Silva-Magalhães, L. E. Borba-Telles, Sociodemographic, criminal and forensic characteristics of a sample of female children and adolescents murdered in Brazil. 2010-2016, *Rev Fac Med*, 67(3) (2019) 201–8. 10.15446/revfacmed.v67n3.73245.
- [66] G. Zara, F. Freilone, S. Veggi, E. Biondi, D. Ceccarelli, S. Gino, The medicolegal, psycho-criminological, and epidemiological reality of intimate partner and non-intimate partner femicide in North-West Italy: looking backwards to see forwards, PMID: 31016374 PMID: PMC6570676, *Int. J. Leg. Med.* 133 (2019) 1295–1307, <https://doi.org/10.1007/s00414-019-02061-w>.
- [67] M. Cavlaka, N.D. Ar Mutlub, A.B. Odabas, N.P. Erbaydar, Analyzing two decades of intimate partner femicide-suicides in Türkiye, PMID: 36696879, *J. Forensic Leg. Med.* 94 (2023), <https://doi.org/10.1016/j.jflm.2023.102485>.
- [68] M. Caicedo-Roa, R.C. Cordeiro, Analysis of femicide cases in Campinas, SP, Brazil, from 2018 to 2019 through the ecological model of violence, PMID: 36629567, *Cien. Saude Colet.* 28 (2023) 23–36, <https://doi.org/10.1590/1413-81232023281.09612022>.
- [69] R. Condry, C. Miles, Who counts? The invisibility of mothers as victims of femicide, *Current Sociology* 71 (1) (2023) 43–59, <https://doi.org/10.1177/00113921221097153>.
- [70] E. Ortiz-Prado, P. Villagran, A.L. Martinez-Abarca, A.R. Henriquez-Trujillo, K. Simbaña-Rivera, L.A.M. Gómez-BarrenoDiaz, C.E. Moyano, V. Arcos-Valle, M. D. Miño, S.A. Morgan, Female homicides and femicides in Ecuador: a nationwide

- ecological analysis from 2001 to 2017, *BMC Women's*, PMID: 35761263 PMID: PMC9238169, *Health* 22 (2022), <https://doi.org/10.1186/s12905-022-01839-2>.
- [71] A. Sorrentino, V. Cinquegrana, C. Guida, Risk Factors for Intimate Partner Femicide-Suicide in Italy: An Ecological Approach, PMID: 36012066 PMID: PMC9408495, *Int. J. Environ. Res. Public Health* 19 (2022), <https://doi.org/10.3390/ijerph191610431>.
- [72] S. Neves, E. Silva, J. Topa, J. Borges, A. Pereira, E. Silva, Death Threats and Attempted Femicide in the Context of Domestic Violence in Portugal, *Soc. Sci.* 11 (2022), <https://doi.org/10.3390/socsci11080347>.
- [73] E. Cantor, R. Salas, R. Torres, Femicide and Attempted Femicide before and during the COVID-19 Pandemic in Chile, PMID: 35805670 PMID: PMC9265640, *International Journal of Environmental Research and Public Health* 19 (2022), <https://doi.org/10.3390/ijerph19138012>.
- [74] A. Giorgetti, P. Fais, E. Giovannini, C. Palazzo, I. Filipuzzi, G. Pelletti, S. Pelotti, A 70-year study of femicides at the Forensic Medicine department, University of Bologna (Italy), PMID: 35134699, *Forensic Sci. Int.* 333 (2022), <https://doi.org/10.1016/j.forsciint.2022.111210>.
- [75] S. Daher-Nashif, Intersectionality and Femicide: Palestinian Women's Experiences with the Murders of Their Beloved Female Relatives, PMID: 34170715, *Violence Against Women* 28 (5) (2022) 1077–1097, <https://doi.org/10.1177/10778012211014561>.
- [76] S. Caman, J. Sturup, K. Howner, Mental Disorders and Intimate Partner Femicide: Clinical Characteristics in Perpetrators of Intimate Partner Femicide and Male-to-Male Homicide, *Frontiers*, PMID: 35386515 PMID: PMC8977448, *Psychiatry* 13 (2022), <https://doi.org/10.3389/fpsy.2022.844807>.
- [77] S. Neves, A. Correia, Intimate Partner Femicide in Portugal: the perception of intervention professionals with intimate partner violence, *Observatorio (OBS*)* 16 (2) (2022) 117–137, <https://doi.org/10.15847/obsOBS16220221916>.
- [78] M. Solinas-Saunders, Intimate Femicide-Suicide in Italy Between 2015 and 2019: A Comparison to Intimate Femicide Without Suicide, *Homicide Studies* (2022). [10.1177/10887679221103783](https://doi.org/10.1177/10887679221103783).
- [79] F. McLachlan, B. Harris, Intimate risks: examining online and offline abuse, homicide flags, and femicide, *Vict. Offenders* 17 (5) (2022) 623–646, <https://doi.org/10.1080/15564886.2022.2036658>.
- [80] J. Santos-Hermoso, J. L. González-Álvarez, M. Á. Alcázar-Córcoles, E. J. Carbonell-Vayá, Intimate Partner Homicide Against Women Typology: Risk Factor Interaction in Spain, *European Journal on Criminal Policy and Research* ((2022) 1–23. DOI 10.1007/s10610-022-09517-7.
- [81] M.F. Aebi, L. Molnar, F. Baqueriza, A.A. Odds, Femicide Did Not Increase During the First Year of the COVID-19 Pandemic: Evidence from Six Spanish-Speaking Countries, PMID: 36685336 PMID: PMC9840973, *J. Contemp. Crim. Justice* 37 (4) (2021) 615–644, <https://doi.org/10.1177/10439862211054237>.
- [82] G. Vignali, L. Franceschetti, I. Merzagora, A retrospective study on femicides assessed at the Institute of Legal Medicine of Milan. Are older women at risk?, PMID: 34225210, *Forensic Sci. Int.* 325 (2021), <https://doi.org/10.1016/j.forsciint.2021.110890>.
- [83] S. Potenza, C. Valentina, F. Alessandro, L.T. Marsella, G.L. Marella, Femicide in a central Italy district (Southern Latium) in the period 1998–2018, *Minerva Psichiatr.* 62 (1) (2021) 12–17, <https://doi.org/10.23736/S2724-6612.20.02063-4>.
- [84] J. Santos-Hermoso, M.L. Heredia, B.S. Martín, J.L.G. Álvarez, La ruptura de la pareja y su influencia en la dinámica relacional en casos de feminicidio, *Revista Española De Investigación Criminológica: REIC* 19 (1) (2021), <https://doi.org/10.46381/reic.v19i1.455>.
- [85] M.F.G. Monteiro, J.A.F. Romio, J. Drezett, Is there race/color differential on femicide in Brazil? The inequality of mortality rates for violent causes among white and black women, *Journal of Human Growth and Development* 31 (2) (2021) 358–366, <https://doi.org/10.36311/jhgd.v31.12257>.
- [86] N. Nur, An assessment of intimate partner femicide in the name of honour in Turkey: a retrospective epidemiological study, PMID: 34185735, *Psychiatr. Danub.* 33 (2) (2021) 152–157, <https://doi.org/10.24869/psyd.2021.152>.
- [87] A. Sorrentino, C. Guida, V. Cinquegrana, A.C. Baldry, Femicide Fatal Risk Factors: A Last Decade Comparison between Italian Victims of Femicide by Age Groups, PMID: 33138206 PMID: PMC7663452, *International Journal of Environmental Research and Public Health* 17 (2020), <https://doi.org/10.3390/ijerph17217953>.
- [88] J. Radford, D.E. Russell (Eds.), *Femicide: The politics of woman killing*, Twayne Publishers, 1992.
- [89] Understanding and addressing violence against women. Femicide. 2012. http://a.pps.who.int/iris/bitstream/10665/77421/1/WHO_RHR_12.38_eng.pdf?ua=1 last accessed date: September 12th, 2023.
- [90] Drug use and crime. <https://bjs.ojp.gov/drugs-and-crime-facts/drug-use-and-crime> last accessed date: September 12th, 2023.
- [91] C. Kouta, S. Boira, A. Nudelman, A.K. Gill, *Understanding and preventing femicide using a cultural and ecological approach*, in: *Femicide across Europe*, Policy Press, 2018, pp. 53–70.
- [92] N. Abrahams, S. Mathews, L.J. Martin, C. Lombard, R. Jewkes, Intimate partner femicide in South Africa in 1999 and 2009, PMID: 23565064 PMID: PMC3614499, *PLoS Med.* 10 (4) (2013), <https://doi.org/10.1371/journal.pmed.1001412>.
- [93] C. Rodway, S. Flynn, D. While, M.S. Rahman, N. Kapur, L. Appleby, J. Shaw, Patients with mental illness as victims of homicide: a national consecutive case series, *Lancet Psychiatry* 1 (2) (2014) 129–134, [https://doi.org/10.1016/S2215-0366\(14\)70221-4](https://doi.org/10.1016/S2215-0366(14)70221-4). PMID: 26360576.
- [94] M.P. Marshal, For better or for worse? The effects of alcohol use on marital functioning, PMID: 14624823 PMID: PMC2700350, *Clin. Psychol. Rev.* 23 (7) (2003) 959–997, <https://doi.org/10.1016/j.cpr.2003.09.002>.
- [95] A. Beck, A. Heinz, Alcohol-related aggression-social and neurobiological factors. *Deutsches Ärzteblatt International*, 110(42)((2013) 711. PMID: 24223671 PMID: PMC3820993 10.3238/arztebl.2013.0711.
- [96] G.L. Stuart, J.C. Meehan, T.M. Moore, M. Morean, J. Hellmuth, K. Follansbee, Examining a conceptual framework of intimate partner violence in men and women arrested for domestic violence, PMID: 16536134, *J. Stud. Alcohol* 67 (1) (2006) 102–112, <https://doi.org/10.15288/jsa.2006.67.102>.
- [97] G. Margolin, R. S. John, L. Foo, Interactive and unique risk factors for husbands' emotional and physical abuse of their wives, *Journal of Family Violence*, 13 ((1998) 315–344. <https://doi.org/10.1023/A:1022880518367>.
- [98] D.A. Weinberger, K. Bartholomew, Social-emotional adjustment and patterns of alcohol use among young adults, PMID: 8656325, *J. Pers.* 64 (2) (1996) 495–527, <https://doi.org/10.1111/j.1467-6494.1996.tb00519.x>.
- [99] C. R. Colder, R. O'Connor, Attention biases and disinhibited behavior as predictors of alcohol use and enhancement reasons for drinking, *Psychology of Addictive Behaviors*, 16(4) (2002) 325–32, 2002. PMID: 12503905.
- [100] I. De la Ossa Izquierdo, The Patasola: archetypal roots of feminine identity in exile in a Colombian myth, PMID: 35417572, *J. Anal. Psychol.* 67 (1) (2022) 208–222, <https://doi.org/10.1111/1468-5922.12758>.