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Profile of women treated at a high complexity hospital due to aggression by burns by their partner

Perfil de mulheres atendidas em hospital de alta complexidade devido a agressão por queimadura pelo parceiro

Perfil de mujeres atendidas a un hospital de alta complejidad por asunción por quemaduras por parte de la pareja

ABSTRACT

Objective: To describe the profile of care provided to women who were assaulted by their intimate partner and suffered burns at a trauma, urgent and emergency referral hospital in the state of Minas Gerais. **Method:** A cross-sectional study analyzing the medical records of 19 women who were victims of intimate partner burns at a trauma, urgent and emergency referral hospital between 2016 and 2019. **Results:** Most of the victims were brown, married, with children, worked informally and were assaulted at home. Care included very urgent/orange priority, severe second-degree burns, hospitalization, surgical procedures, complications and post-discharge outpatient follow-up. **Conclusion:** The results indicate highly complex care, which implies the need for health services to establish mechanisms for screening and investigating violence against women, as well as preparing the team, preventing aggravations and offering adequate support.
Descriptors: Aggression; Violence against Women; Intimate Partner Violence; Burns.

RESUMO

Objetivo: Descrever o perfil dos atendimentos a mulheres que foram agredidas pelo parceiro íntimo e sofreram queimaduras em hospital de referência em trauma, urgência e emergência do Estado de Minas Gerais. **Método:** estudo transversal, que analisou prontuários de 19 mulheres vítimas de agressão por queimadura realizadas pelo parceiro íntimo em um hospital de referência em trauma, urgência e emergência no período de 2016 a 2019. **Resultados:** A maioria das vítimas era parda, casada, com filhos, trabalhava informalmente e foi agredida na residência. O atendimento incluiu prioridade muito urgente/laranja, queimaduras graves de 2º grau, internação, procedimentos cirúrgicos, complicações e acompanhamento ambulatorial pós-alta. **Conclusão:** Os resultados indicam atendimentos de alta complexidade, o que implica necessidade de os serviços de saúde estabelecerem mecanismos de rastreamento e investigação da violência contra a mulher, bem como preparo da equipe, prevenindo agravamentos e oferecendo suporte adequado.
Descritores: Agressão; Violência contra a Mulher; Violência por Parceiro Íntimo; Queimaduras.

RESUMEN

Objetivo: Describir el perfil de atención a mujeres que sufrieron agresión por quemaduras por parte de su pareja íntima, atendidas en un hospital de referencia para trauma, urgencia y emergencia en el estado de Minas Gerais (Brasil). **Método:** estudio transversal, que analizó las historias clínicas de 19 mujeres víctimas de agresión por quemaduras por parte de su pareja íntima atendidas en un hospital de referencia de trauma, urgencia y emergencia en Minas Gerais, en el periodo de 2016 a 2019. **Resultados:** La mayoría de las víctimas eran pardas, casadas, con hijos, trabajaban informalmente y fueron agredidas en su casa. La atención incluyó prioridad muy urgente/naranja, quemaduras graves de segundo grado, hospitalización, procedimientos quirúrgicos, complicaciones y seguimiento ambulatorio posterior al alta. **Conclusión:** Los resultados muestran una atención de alta complejidad, lo que requiere que los servicios de salud establezcan mecanismos para el seguimiento e investigación de la violencia contra la mujer, así como una mejor preparación de los profesionales para prevenir los agravamientos y ofrecer una adecuada asistencia.
Descriptores: Agresión; Violencia contra la mujer; Violencia de pareja; Quemaduras.

Cínthia Neves Fonseca[1]
0000-0003-2351-5210

Fernanda Coura Pena de Sousa[2]
0009-0001-1374-9382

Paola Miranda de Sá[1]
0009-0003-9795-3536

Daniela Aparecida Morais[3]
0000-0001-5708-5672

Kleyde Ventura de Souza[2]
0000-0002-0971-1701

Allana dos Reis Côrrea[2]
0000-0003-2208-958X

[1] Fundação Hospitalar do Estado de Minas Gerais, Belo Horizonte, MG, Brazil.

[2] Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil.

[3] Serviço de Atendimento Móvel de Urgência de Belo Horizonte, Belo Horizonte, MG, Brazil.

Corresponding author:
Cínthia Neves Fonseca
E-mail: cinthianevesfonseca@hotmail.com

INTRODUCTION

Inserted in a patriarchal model of gender structure and hierarchical power, women have historically stood out as the group most vulnerable to aggression, which makes violence against women a global public health problem and a systematic violation of human rights[1-2].

A The World Health Organization (WHO) defines violence against women as any act or conduct of gender-based violence that can cause death, physical, sexual or mental harm or suffering to a woman, including the threat of such acts, and coercion or arbitrary deprivation of liberty, whether occurring in public or private[1,3]. According to the definition, violence against women includes physical, sexual and psychological violence, and can occur within the family, domestic unit or in the community[3].

O The number of incidents of violence against women has increased over the years. A biannual Brazilian survey carried out by the DataSenado Research Institute indicated that in 2021 at least 29% of Brazilian women have suffered domestic violence, with current partners (husband/partner/boyfriend - 56%) and ex-partners (20%) reported as the main aggressors[4]. This situation has become even more accentuated in times of the COVID-19 pandemic, due to the home isolation to which families have been submitted, which has increased the length of time women are living with and exposed to their aggressors[4-5]. The high rates of violence have kept Brazil as the country with the 5th highest incidence of femicides in the world (4.7 murders per 100,000 women)[6], data that reinforces the need to combat domestic violence[4].

The marital situation and subordination, therefore emotional and affective, can direct the victim's attitudes in the face of violence: since the aggressor is the woman's partner and the father of their children, there is a tendency not to take any action in order to protect the integrity of the family[7-9]. Thus, the woman stays in the relationship, assuming that such behavior will not be repeated. However, the phenomenon of conjugal violence is characterized by the frequency of episodes of aggression, which are increasingly degrading to the woman, mentally and physically, and the burns committed by the partner are indicative of an escalation in the severity of domestic violence[9-10].

Among the various forms of aggression to which women are exposed, burn injury is recognized as one of the most serious, disabling traumas, which disfigure the victim and lead to a prolonged period of health care and recovery. Burns require immediate treatment due to their urgency, and are related to hospitalization, pain, edema, rigidity of the affected areas and possible impairment of vital functions[11-12]. The impact of injuries is not limited to physical damage, but also affects psycho-emotional and relational aspects[12]. The victim experiences an even more negative value with the marks and scars left by the aggressor, which impact, in addition to body image, self-esteem, caring for others and mental health[10].

Women suffer significant physical, mental and social health consequences associated with domestic violence: high blood pressure, heart disease, anxiety disorders, depression, sleep and eating disorders are some of the problems mentioned, which can lead to death, either by homicide or suicide[2].

Data from 2021 shows that 36% of victims required health care in the face of the violence they suffered[4], with emergency services being one of the routes most taken by these victims. In these services, health professionals tend to prioritize life-threatening injuries, and the focus of care ends up being more directed towards stabilizing physical injuries, which contributes to increasing the invisibility of partner violence as a social problem, of greater scope and with impacts on the health-disease process[8,10]. These aspects show how great the challenge is

to obtain and analyze data related to the cycle of conjugal violence, given the specificities of the phenomenon[7,9].

As a result of this complexity, intimate partner violence (IPV) represents a challenge for the health sector, a problem that needs to be dealt with from the perspective of integrated care[8]. In this sense, it is essential to know the epidemiological profile of assaulted women treated in emergency services so that the institution can learn about and improve strategies for more effective and qualified care, with a view to dealing with this problem.

The elimination of violence against women is part of the Pan American Health Organization's (PAHO) Sustainable Development Goals (SDGs) for 2030, and part of the PAHO 2015 Strategy and Action Plan[1] and WHO[3] is to strengthen data collection systems and measure the proportion of women and girls over the age of 15 who have been victims of physical, sexual or psychological violence in the previous 12 months, by a current or former intimate partner[1,3].

Drawing up profiles and describing epidemiological characteristics not only makes it possible to take effective and assertive action in the gaps generated by the problem in question, but also gets to know the population that is being cared for and broadens the scope and evolution of the health system.

Thus, considering the context of the issue of violence against women, the seriousness of burn injuries as a recurrence of aggression and the need to evaluate health services, this study aimed to describe the profile of care provided to women who had been assaulted by an intimate partner and suffered burns in a trauma, urgent and emergency referral hospital in the state of Minas Gerais.

It is hoped that the results of this study will improve the understanding of the problem, which is still little explored in the literature, and help in the proper management of cases, taking into account the flow of the hospital institution and contributing to surveillance, notification and quality care for women in this context.

METHODOLOGY

This is a cross-sectional, retrospective study, guided by the Strengthening the Reporting of OBservational studies in Epidemiology (STROBE) instrument, carried out at the Hospital of Pronto-Socorro João XXIII (HJXXIII), a care center for polytrauma patients and a national reference in the treatment of major burns, located in the city of Belo Horizonte, Minas Gerais.

The study population consisted of all cases of women older than or equal to 15 years, victims of physical aggression by burns deliberately caused by an intimate partner and treated at the hospital between 2016 and 2019, which was established because it represents the 10-year mark of the Maria da Penha Law (2016), a reference to the subject, until 2019, when the research project was being processed for the completion of hospital residency.

During the period, a total of 205 medical records of women victims of partner violence were obtained, 180 of which were obtained by identifying the notification forms from SINAN (Sistema de Informação de Agravos de Notificação - Information System for Notifiable Diseases). Of these, 11 were not found by the data available in the medical records system, in addition to 36 cases that were identified and added to the list of cases of violence attended by the hospital's Psychology and Social Services. Of the 205 medical records reviewed, 19 were confirmed cases of victims of aggression due to burns caused by IPV, thus making up the population of this study and analyzing it in its entirety.

The study included variables relating to socio demographic aspects: age, skin color/race, schooling, marital status, length of relationship with the aggressor, presence of children, occupation and place of residence; variables relating to

the women's health history: previous illness(es), use of medication, previous psychological care; variables relating to the episode of violence: date, day of the week, time, place of occurrence, type of transport to the hospital, link with the aggressor and form of aggression; variables related to hospital care: level of priority/severity on hospital admission, injury(s) resulting from the aggression, length of hospital stay and patient outcome, in order to characterize the occurrence profile, according to reference literature on the subject.

For the data collection, an instrument was developed covering the variables listed for the study. The data was collected from November 2020 to February 2021, in two stages. At first, a survey of all women victims of violence was carried out with the institution's total care statistics sector, as well as consulting the hospital's social service and psychology care record worksheet, in order to ensure the completeness of information related to the first care provided to women.

The second stage covered consultations with electronic medical records, found in the hospital's computerized system, and physical medical records, available in the Medical Archive and Statistics Service (SAME), in order to guarantee the comprehensiveness of the information, given that the institution's professional records are kept in a hybrid way, both in a computerized system and manually.

After filling in the data collection form, they were transcribed into the Epidata 3.1 database by double typing and submitted to descriptive statistical analysis. Continuous variables were analyzed using measures of central tendency (mean and median) and qualitative variables were presented using absolute and relative frequencies.

This study was based on the Resolution 466/2012 of the Ministry of Health's National Research Ethics Commission, which stipulates ethical standards regulating research involving human beings and which was submitted to the Ethics Committee of the Minas Gerais State Hospital Foundation (FHEMIG), with the approval number 4.886.540. Due to the nature of the research, which was restricted to consulting secondary data, without identification or contact with the patient, the free and informed consent form (TCLE) was not required for study participants.

RESULTS

Sociodemographic data

A total of 19 women who had been assaulted with burns by their intimate partner were interviewed. Their ages ranged from 18 to 57 years, with a median of 38 years (IQ: 29-46). The predominant race/skin color was brown (68.42%).

With regard to the level of schooling, there was a significant loss of data, given that 68.42% of the cases did not provide this information in the medical records, and 15.79% of the women had finished high school.

With regard to marital status, more than half were married (52.63%), while the others were single (42.11%) and separated/divorced (5.26%). 63.16% of the medical records described the length of the relationship with the aggressor, the average of which was 3.2 years (SD±2.75). Most of the women had children (73.68%), ranging from one to six. Most of them lived with their mother (78.57%), 42.86% of them with the aggressor's paternity informed.

Most of the women worked informally (47.37%), followed by formal work (21.05%) and no work (21.05%). None of them reported receiving any social benefits. There was no record of this variable in 10.53% of the medical records.

With regard to occupation, there was a predominance of women who did domestic work (41.67%), followed by hairdresser, manicurist, sales clerk, administrative assistant, domestic worker/faxer, farm worker and university student, each category with one woman, respectively. 15.79% reported living on the streets after the violence. This variable was not recorded in 36.84% of the medical records.

Women's health history

Most of the victims reported having an illness (73.68%), and a significant proportion of them were taking medication (42.11%). This data is shown in Table 1.

Table 1 – Previous illnesses and medications used by women who suffered burns by their partner treated at a referral hospital. Belo Horizonte, MG, Brazil. 2016-2019.

PREVIOUS DISEASE (N=14)	N	%
Psychiatric Disease	8	57.14
Systemic Arterial Hypertension	6	42.86
Neurological Disease	3	21.43
Respiratory Disease	2	14.29
Obesity	2	14.29
Gastrointestinal disease	1	07.14
Cancer	1	07.14
Other diseases	3	21.43
MEDICINES (N=8)	**N**	**%**
Antidepressant	5	62.50
Antihypertensive	4	50.00
Benzodiazepine	4	50.00
Diuretic	2	25.00
Anticonvulsivant	2	25.00
Antipsychotic	2	25.00
Gastric Protector	1	12.50

Source: prepared by the authors, 2021.

Regarding previous psychological counseling, almost half of the women reported having done it (47.37%), and the same percentage (47.37%) had never done it. There was no record of this in any of the medical records (5.26%).

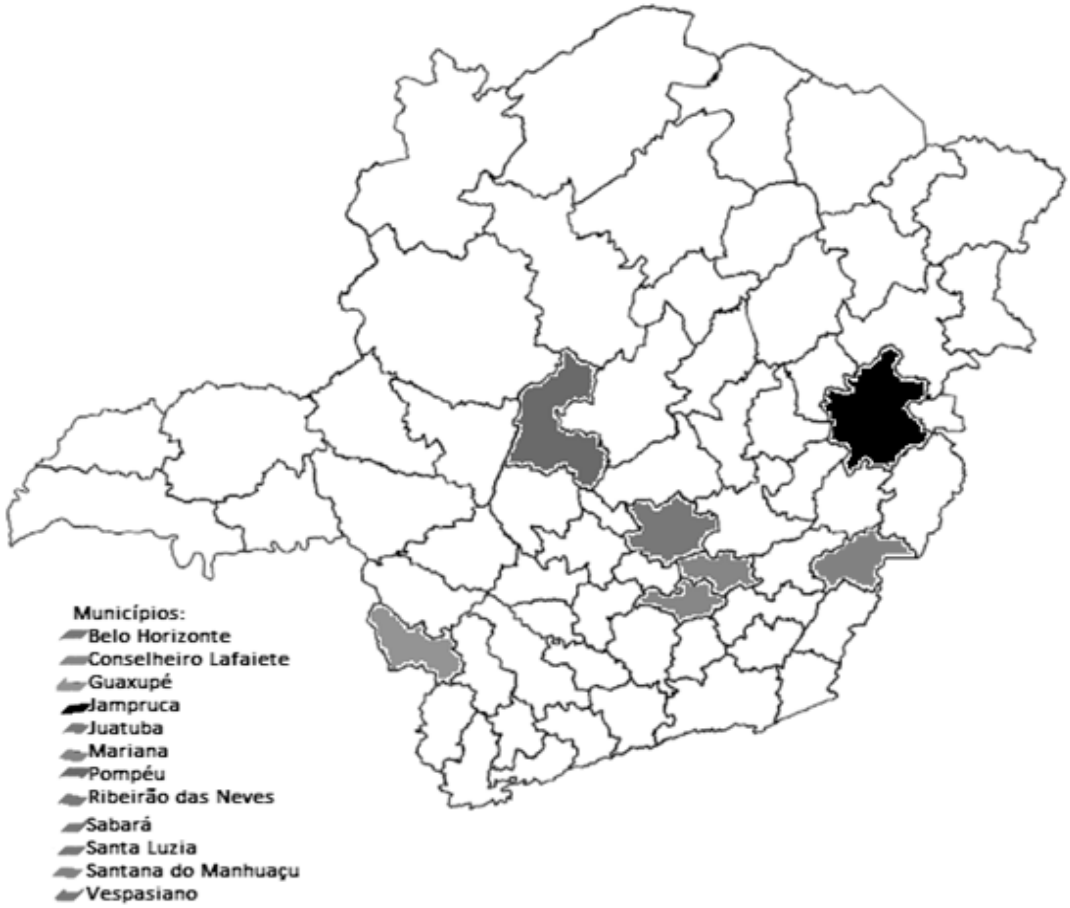
Characterization of aggression

The episode of violence occurred predominantly on weekends (78.95%), at night and in the early hours of the morning, which represented 47.36% of the cases. 73.69% took place in the woman's home, followed by a public place or street (21.05%). 36.84% of cases occurred in the city of Belo Horizonte, and 63.16% in other cities in the state of Minas Gerais. Figure 1 shows the regions of the state where women were assaulted by their partners.

The aggression was mainly committed by the spouse (31.58%), but also by the boyfriend (21.05%), ex-spouse (15.79%) and the categories ex-boyfriend, lover and ex-partner with 10.53%, with the majority of cases not being the first aggression, but a recurring situation in the relationship (61.16%). Alcohol consumption by the aggressor was present in 31.58% of the reports, and illicit drug consumption in 15.79%. In the case of the victims, both alcohol and drug use were recorded in 26.32% of the medical records.

Regarding the time between the aggression and the victim's admission to hospital, the majority took less than a day (52.63%). Of these, 31.58% occurred in less than an hour. Most of the women were burned exclusively (73.68%), however, there were cases in which the victim was exposed to more than one form of aggression (26.32%) associated with the burn to the body, such as direct physical force/beating (10.53%), perforation by a fire weapon (PAF) (5.26%), perforation by a white weapon (PAB) (5.26%), and being pushed from a height (5.26%).

Figure 1 – Regions of the State of Minas Gerais where women were assaulted by their partners. Belo Horizonte, 2016-2019.



Source: prepared for the purposes of this study

Characterization of health care

The majority of the population studied had their first care at a high-complexity hospital (52.63%). The remaining women were first seen in hospitals in cities in the countryside of the state (31.58%) or in Emergency Care Units in Belo Horizonte and the metropolitan region (15.79%).

The victim was brought in by the Mobile Emergency Care Service (SAMU 192) (31.58%), by ambulance with a health professional (21.05%), by the fire department (15.79%), or by the police, family/friends or on their own, each in 10.53% of cases.

On their admission to the hospital, the majority of the women were conscious (89.47%), with a Glasgow Coma Scale score of 15 (84.21%) or 14 (5.26%), and were classified as very urgent risk/orange (61.54%), followed by 15.39% with the color red/emergency, 7.69% classified as yellow/urgent, and another 15.39% as green/less urgent. In addition to burns, the women also presented contusions (21.05%), abrasions (10.53%), sharp injuries (10.53%), blunt injuries (5.26%) and bone fractures (5.26%).

In addition to General Surgery, Trauma Surgery and Plastic Surgery, all the women required hospital assessment/monitoring by other specialties, mainly Internal Medicine (84. 21%), Infectious Diseases (21.05%) and Orthopedics (15.32%), 21%), General Surgery (21.05%), Infectious Diseases (26.32%), Nephrology (21.05%), Orthopedics (15.79%), Vascular Surgery (15.79%), Otorhinolaryngology (15.79%), Neurology (10.53%) and Thoracic Surgery (10.53%).

In terms of the agent that caused the burn, alcohol and gasoline were also the substances most involved in the aggression, accounting for 63.16% of cases, followed by boiling water (15.79%), and one episode each (5.26%) related to the use of cachaça, acetone, a heated knife point and extensive abrasion caused by being hit on purpose by a car. With regard to burnt body surface area (BSA), the majority of women had 10% to 30% (73.68%), followed by those with 70% to 80% BSA (15.79%), and less than 10% BSA (10.53%).

The burns were evaluated in terms of severity and degree, with a predominance of severe burns (63.16%), followed by medium (26.32%) and minor (10.53%) burns. As for the degree of burns, 89.47% had 2nd degree burns, 68.42% had 3rd degree burns and 5.26% had 1st degree burns.

The data on where the injuries occurred shows that all the women had multiple body regions affected at the same time, distributed as follows: chest (78.95%), lower limbs (except feet) (78.95%), upper limbs (except hands) (63.16%), abdomen (57.89%), dorsal region (52.63%), cervical region (52, 63%), head regions (except face) (15.79%), hands (15.79%), feet (15.79%), pelvis (10.53%), ears (5.26%), genital region (5.26%), face (4.39%).

In 52.63% of the cases, it was not identified from the time of admission that the case involved domestic violence against the burned woman. The first professional to report such violence in their medical records was the doctor (36.84%), followed by the social worker (26.32%), nurse and psychologist, with 15.79% each. One case (5.26%) was reported by the physiotherapist.

Due to the severity of the cases, 94.74% of the women required hospitalization, all of which required the use of invasive devices. The invasive devices used, as well as the procedures and other care, are listed below in Table 2.

Table 2 – Invasive Devices and Other Procedures and Care Demanded by Women Burned by their Partners in a Referral Hospital. Belo Horizonte, 2016-2019 (n=19)

INVASIVE DEVICES	N	%
Peripheral Venous Catheter	19	100.00
Bladder catheter	12	63.16
Orotracheal tube	11	57.89
Naso/Oroenteric Catheter	10	52.63
Central Venous Catheter	8	42.11
Arterial Catheter	6	31.58
Tracheostomy	5	26.32
Bladder Relief Catheter	3	15.79
Other Invasive Devices	3	15.79
Naso/Oro Gastric Catheter	2	10.53
Drains	2	10.53
PROCEDURES AND CARE	**N**	**%**
Oxygen therapy	14	73.68
Mechanical ventilation	11	57.89
Blood transfusion	11	57.89
Enteral diet	9	47.36
Nutritional supplementation	9	47.36
Immobilization with cast or other splints	4	21.05
Sutures	4	21.05
Hemodialysis	2	10.53
DRESSINGS		
Dressing with Silver Sulfadiazine	18	94.74
Dressing with Kollagenase	14	73.68
Essential Fatty Acid Dressing (E.G.A. / Monocarboxylic Acids / Linoleic Acid)	14	73.68
Hydrocarbon dressing	9	47,37
Dressing with antimicrobial microfiber / sodium carboxymethylcellulose	6	31,58
Dressing with Polyethylene Mesh with nanocrystalline silver + absorbent rayon and polyester	4	21,05
Dressing with Prontosan (Purified water, 0.1% undecyl amidopropyl betaine, 0.1% polyhexanide, glycerol, hydroxyethylcellulose)	3	15,79
Other Special Dressings *	3	15,79

Source: elaborated by the authors, 2021.

* It was found that women used bandages with hydrogel (1), hydropolymer (1), cavilon (Heatless Protective Film - PPSA/ Polymer Solution) (1), hydrocolloid (1) and protective film (1), each of them a type of bandage, but with simultaneous use of different coverings, as also occurred with the other bandages in the table.

All the women had an imaging test, mainly a chest X-ray (68.42%), and laboratory tests, especially cultures to look for microorganisms in skin secretions in the burn area (63.16%), blood cultures (47.37%) and urocultures (47.37%).

The use of medication was also frequent: all (100.00%) used analgesics/antipyretics, and 94.74% used gastric protectors (94.74%). The use of antibiotics (78.95%) and vasoactive drugs (epinephrine, 42.11%, and noradrenaline, 36.84%) stood out, reflecting the severity and health conditions of the victims.

The majority (78.95%) of the women required surgery, followed by general surgery (21.05%), vascular surgery (15.79%), orthopedic surgery (5.26%) and thoracic surgery (5.26%).

Given the aggression suffered and the hospital treatment required, more than half (57.89%) had some complication, as shown in Table 3.

As for the place of hospitalization, more than half of the women (52.63%) required treatment in the Intensive Care Unit (ICU), with an average stay of 25 days (SD: ±19.54) in this unit. The majority (68.42%) of the women were treated on the ward, with an average of 28 days (SD: ±12.70). The total length of hospital stay ranged from 5 to 99 days, with a mean of 34 days (SD: ±25.28).

Concerning the outcome, hospital discharge prevailed (78.95%), with the majority of women having been referred to the outpatient clinic for continuity of treatment (73.68%), the same percentage of women with sequelae/limitations described in their medical records at discharge (73.68%), with the need to return to outpatient services at the hospital itself or FHEMIG's hospital network (63.16%) and, in one case, readmission for continuity of treatment (5.26%). Four women (21.05%) died.

Table 3 – Complications presented by women burned by their partner treated at a referral hospital. Belo Horizonte, 2016-2019 (n=19)

COMPLICATION	N	%
Sepsis / septic shock	10	52.63
Skin infections	7	36.84
Multidrug-resistant microorganism	5	26.32
Thoracic / respiratory complications *	4	21.05
Acute renal failure (ARF)	3	15.79
Coagulopathy	3	15.79
Pneumonia	3	15.79
Pressure Injury (PI)	3	15.79
Digestive bleeding	2	10.53
Tracheitis	2	10.53
Urinary Tract Infection (UTI)	2	10.53
Pneumothorax	2	10.53
Metabolic acidosis	2	10.53
Hemothorax	1	05.26
Other complications **	6	31.58

Source: prepared by the authors, 2021.

* Thoracic/respiratory complications in which each woman had one of the following: Prolonged laryngeal edema (1); Acute pulmonary edema (1); Acute respiratory distress syndrome *(ARDS) (1); Tracheoesophageal fistula (1).

** Among the other complications, each woman had one of the following: CA (1); Rhabdomyolysis (1); Arterial ischemia (1); Hyperkalemia (1); Loss of skin grafts (1); Ocular infection (1).

DISCUSSION

Sociodemographic profile

The data from this study pointed to victimization by IPV burns, mainly among young and brown women. Other studies on domestic violence corroborate the fact that the majority of cases occur among young, brown or black women of reproductive age[4-13,14], as well as a possible correlation between lower age at first marital union and higher parity[15]. National statistics have shown an increasingly early

onset of the phenomenon in relationships, with 39% of women reporting their first episode of aggression by the age of 19[4], with an increase in the trend of female mortality due to aggression, particularly among young women (20 to 39 years old) and brown women[7].

As for educational level, the low level of schooling found has been considered a consistent risk factor, mainly because it is related to low income, unemployment and socioeconomic status[1,4,13]. Research has shown that 31% of women assaulted by their partner had incomplete primary education, and 30% had completed high school[4]. Among their work activities, studies highlight the predominance of domestic work and day laborers, followed by unemployed women[7,9], similar to the findings of this study, which also found a more extreme situation of women living on the streets at the time of the violence.

The lower level of education means that a significant proportion of women are informal workers, with no fixed income and no control over household finances, centered on the male figure in the family, which makes it difficult to break away from the abusive relationship, since there is economic dependence on the aggressor to support themselves and their children[5,7,14,16]. There is an understanding that women with higher levels of education probably have more access to information and social and financial resources, which are necessary to recognize and break the cycle of violence that precedes violent events[13-14].

These results point towards the association between violence against women caused by their partners and inequalities: due to the impact of historical and cultural constructions, black women are part of a social disadvantage marker that generally leads to an accumulation of vulnerabilities and predisposition to unfavorable socio-economic situations, such as less schooling and low income, thus resulting in a lack of equity in health[14].

Health history

In relation to the impact of aggression, there is wide evidence of the effects of violence on the development of physical morbidities, mental disorders and influence on the social health of assaulted women[2,7,9,17]. Chronic health problems such as hypertension, heart disease, stroke, facial paralysis, anxiety and post-traumatic stress disorders, depression, sleep and eating disorders, suicidal ideation and compromised sexuality are cited as long-term consequences of violence on women's health[7,17]. These data corroborate the results of this study, in which the women who were burned mainly had high blood pressure and psychiatric disorders, and used antidepressant medication.

As for the acute effects, conjugal violence can result in fractures, traumatic brain injuries, skin lacerations, burns, as investigated in this study, and can even lead to the woman's death. In addition, women who experience abuse have a significantly higher risk of engaging in dangerous behaviors, such as alcohol and drug abuse, and contracting sexually transmitted infections [17].

Characterization of the assault

Approximately one third of the cases treated were of women who had been assaulted in the municipality of Belo Horizonte, where the scenario institution is located. However, women from municipalities in the metropolitan region and more distant cities also formed part of the sample. This data shows the seriousness of the cases and the response in the health network, considering that the setting is a reference institution for the care of major burn victims in the state of Minas Gerais.

As for the relationship with the aggressor, the act of burning the partner followed the same profile as the general literature on domestic violence, in which 52% of women suffered violence from their husband or partner, 17% from their ex-husband or ex-partner, 4% from their

boyfriend and 3% from their ex-boyfriend, with an increase in aggression committed by partners, from 13% in 2011 to 37% in 2019[4], as in the present study, which also showed a higher percentage of aggression against women with a spousal relationship with the aggressor.

Instead of being a peaceful and safe space, the home represents a major place of violence for many women. Some men's sense of possession over their partners and the naturalization and invisibility of domestic violence make the intra-family environment immersed in a dynamic of chronic stress, conflict and frustration, driven by their partner's possessive and destructive behaviour[5,13,18]. This situation is associated with the predominance of episodes of aggression at weekends, at night and in the early hours of the morning, when the woman's exposure to the aggressor in the home intensifies[13].

Even in the presumed safety of their homes, many women remain in abusive relationships, due to their characteristic profile, which is usually cyclical, with an oscillation between violent periods and non-violent cohabitation, in which there is an escalation in the intensity of the violence, which begins with mild attitudes, until it reaches physical aggression[18], which is increasingly traumatic, including physical burns[18]. Fluctuations in attitudes linked to fear of further aggression and repercussions for the family, especially the children, usually limit women's autonomy and their ability to effectively seek help to break the cycle of violence[7,9,18-19].

The control, the lack of autonomy and the oppression to which women are subjected from childhood onwards encourage situations of violence that can be extended to future relationships and often be reflected in hasty decision-making throughout life, in search of freedom and escape from the aggressive situation already experienced at home. The naturalization of violence contributes to its reproduction, on the part of the aggressor, and acceptance, on the part of the victim, attributing meanings and being responsible for the conduct taken and reducing the possibilities of coping[20].

A previous study found that most women killed by aggression had suffered previous episodes of violence[16]. This shows that violent behavior is repetitive and becomes more and more serious over time, a factor that proves the fragility of the care and protection networks for women in this situation[16-17].

In relation to the profile of the aggressor, low income, little schooling, a history of child abuse, exposure to domestic violence, as well as the use of alcohol and illicit drugs, have been identified as common characteristics[9-11,16,20]. In the present study, there were reports of alcohol consumption and illicit drug use on the part of the aggressor, although this did not correspond to the majority of them. Behavioral factors and even life experiences can influence the context of aggression, making women more exposed and vulnerable to the cycle of violence[9,11].

Studies have shown that the use of alcohol at home is the main causal factor[11-12]. In this study, alcohol and gasoline were the main agents used in aggression against women. In an integrative review, liquid alcohol was the main causal agent and was present in 54% of the articles[10]. It should be considered that this element is an accessible, low-cost item, present in most Brazilian homes, as well as being extremely flammable, which may justify the greater frequency of use of this item in cases of burns[10].

In addition to physical burns, this study also identified, in association, the occurrence of aggression by direct physical force, perforation by a white weapon (PAB) and perforation by a firearm (PAF). The promotion of policies that make it easier to obtain weapons may result in an increase in the danger faced by women who are victims of violence, something that has already been proven by the increase in cases of femicide in the country[14].

It is notable that when burns occur in conjunction with other forms of violence, they also show a pattern of intentional aggression impregnated by anger, such as beatings, falls from heights, use of physical force or weapons[21]. According to the feminist perspective, domestic violence arises from the power dynamics between men and women, in which the purpose of violence is to establish male domination that puts women under control, leaving them in a position of submission[21].

However, the notion that men have the right to assault women is still an idea that is little explored in the literature, especially when presented in conjunction with other concepts related to intimate partner violence, such as the justification of violence[22]. In a study conducted by Rajan (2018) in a community in Nepal, it was observed that its members considered it acceptable to use violence against their wife when she exceeded the limits of acceptable behavior imposed by them. For some of these members, physical aggression was seen as a method of socializing the woman and adapting her to an appropriate role within the domestic environment.

Besides the direct impacts, in terms of social and economic costs, this form of violence can result in women feeling isolated, insecure in their home environment, difficulties in keeping a job, loss of income, restricted participation in routine activities, as well as limiting their ability to take care of themselves and their children[3].

Assistance in Healthcare

With regard to health care, this study shows that women who are victims of IPV go through the Emergency Care Network, using pre-hospital care services such as SAMU and the fire department, as well as secondary care services such as the UPAS, and high-complexity hospitals. Thus, as provided for by the Unified Health System, it is important to emphasize the need to articulate care networks, using appropriate referral channels, so that this user can have her health needs met in a full manner[23].

When it comes to caring for these women, the complex nature of reception is still a challenge for the health sector. A Brazilian study showed that women who have been raped face obstacles in seeking health care, as they are often prevented from doing so by both their partner and their partner's family, in order to protect them from legal consequences due to their possible involvement in criminal activities and ongoing legal proceedings[16]. This information justifies the findings of this study, because although most of the women treated had a preserved level of consciousness and orientation (score of 15 on the Glasgow Coma Scale), they found it difficult to immediately report the nature of the violence to the health services.

In many countries, it is unlikely that health professionals regularly question women about their involvement in abusive relationships or check for typical signs of violence[23-24]. This fact is related to the results of this study, which refer to the fact that most doctors or social workers realize late on that the injury was caused by domestic violence, which usually does not occur at the time of admission. This lack of preparation often results in an inability to deal adequately with the consequences of violence[23]. Thus, when physical injuries cannot be adequately explained by the report, signs and symptoms, or detailed history, certain statements by women can serve as a warning sign and indicate the suspicion of aggression[24].

On admission, most of the participants in this study were classified as very urgent (orange classification) and emergency (red), demonstrating the critical profile of this population. In this study, there were women with little neurological impairment (the majority with a Glasgow Coma Scale score between 14-15), but with a CWS of more than 10% and burns classified as very serious. The magnitude of

the clinical severity could also be recognized in the types of physical injuries found during the assessment of these patients: a higher occurrence of burns, with a predominance of second and third degree, respectively, presenting a profile of high severity([12]. In relation to CQS, as with the findings of this study, it is known that they are considerably extensive, ranging from individuals with minor burns to cases of imminent risk of death[10].

As for the predominance of anatomical regions affected by burns, the chest, upper limbs and lower limbs stand out, followed by trauma to the face. It has been argued that injuries to the limbs may represent a defensive behavior on the part of the victim, using them as protection, especially the face, a region associated with humiliation when attacked[16].

Data from this study corroborates a national study[10] and shows the high need for drug administration and intensive care during hospitalization, with invasive and surgical procedures, in an attempt to reduce patients' suffering. On the one hand, while the prolonged stay of burned women and the uninterrupted provision of care contributes to their survival[11,12], on the other hand, the costs of hospitalizations place a substantial burden on health services[10]. An American study showed that the lifetime cost of intimate partner violence is more than US$ 100,000 per female victim, and the cumulative economic burden is almost US$ 3.6 trillion. Medical costs account for 59% (US$ 2.1 trillion), lost productivity 37% (US$ 1.3 trillion), criminal justice costs 2% (US$ 73 billion), and other costs, such as property loss/damage, account for the remaining 2% (US$ 62 billion)[25].

In the post-burn period, burn patients require complex treatment, as their health is precarious and often unstable, with physical and psycho-emotional aspects compromised, and they go through periods of concern for survival, as well as moments of deep sadness, depression, generalized anxiety and stress, anger and dependence until they fully recover[10]. In this context, there is a need for a support network, usually made up of health professionals, friends and family, to establish relationships of support and understanding of the situation, and the correct therapeutic management is important to reduce the patient's stress and suffering[16].

In particular, nurses, as part of the health team, play a significant role in dealing with violence, using welcoming strategies that put the victim at the forefront of care actions aimed at addressing the problem. This allows them to redirect their future path, maintaining confidentiality and respecting their rights, since it is a situation in which women feel ashamed and stigmatized[16]. Nurses can also contribute to the development of a scientific and humanized practice that values, understands and takes into account women's experiences and perceptions, their desires and values in relation to the context of their lives, backed by ethical values that promote women's human rights and gender equality[9].

In light of this, it is recommended that actions and services (health units, women's police stations, support homes for battered women) be implemented in strategic locations to serve this population. Their action practices should include strategies to reduce female morbidity and mortality, especially from preventable causes, such as burns caused to women by their intimate partners[1-3]. Most abused women do not have access to this type of care, even though domestic violence is a serious public health problem[10].

That being said, there is a clear need to build new public policies. However, in cases of burn trauma, there are no targeted or priority actions in the field of health care, except for the only preventive action entitled "Fight against burns", on June 6, which embraces the other cases of burns and uses educational strategies to eliminate the most common risks associated with this type of trauma[10].

Although the data in this study is relevant, it is important to point out some limitations. The first concern the selection of cases, since they were collected in a specific specialized service, which may influence the results. In addition, it is necessary to consider that the number of women who sought this service does not reflect all cases of aggression, since some victims may choose not to seek help due to feelings of shame, fear of the aggressor's reaction or worsening of the violence. The under-notification of cases in the Notifiable Diseases Information System (SINAN) and the lack of detailed records in medical records may also have limited the scope and depth of the analysis carried out.

We stress the importance of further studies to obtain qualitative data, given the incompleteness of quantitative records, as a way of highlighting the need to complement the data and expose the relevance of the proposed problem.

CONCLUSION

Based on the analysis of the epidemiological profile of women who suffered aggression from their partner/intimate partner by means of burns, it was possible to identify that the majority were young, brown, with a medium level of schooling, who were at home when they were assaulted, who required highly complex urgent and emergency treatment at a referral center for burns, requiring hospitalization, various imaging and laboratory tests and surgical procedures. The majority were discharged from hospital and referred to continue their care on an ambulatory basis, and had sequelae/limitations.

It is hoped that this study will encourage health services to establish mechanisms for screening and investigating violence against women, especially in the context of primary care. These measures aim to prevent cases from increasing in severity and complexity by providing an early and appropriate approach to identifying and supporting victims. By implementing these mechanisms, it is possible to intervene more effectively, promoting the safety and well-being of women in situations of violence.

In addition, it is essential that health professionals are prepared to investigate, record, notify and provide appropriate guidance to women at the different levels of health care. However, due to the complexity of the silence that often surrounds this phenomenon, it is necessary to adopt strategies to trigger surveillance on the part of primary care services. This includes creating safe spaces where women can reflect on the value of their lives, thus facilitating the identification of violence and providing the necessary support to promote their health and well-being.

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